LCRC FORM 2

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SEP 13 1999
SEP 13

RULES CLEARINGHOUSE

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CLEARINGHOUSE REPORT TO AGENCY

[THIS REPORT HAS BEEN PREPARED PURSUANT TO S. 227.15, STATS. THIS IS A REPORT ON A RULE AS ORIGINALLY PROPOSED BY THE AGENCY; THE REPORT MAY NOT REFLECT THE FINAL CONTENT OF THE RULE IN FINAL DRAFT FORM AS IT WILL BE SUBMITTED TO THE LEGISLATURE. THIS REPORT CONSTITUTES A REVIEW OF, BUT NOT APPROVAL OR DISAPPROVAL OF, THE SUBSTANTIVE CONTENT AND TECHNICAL ACCURACY OF THE RULE.]

CLEARINGHOUSE RULE **99–123**

AN ORDER to . . ., relating to the state uniform plumbing code.

Submitted by **DEPARTMENT OF COMMERCE**

08–11–99 RECEIVED BY LEGISLATIVE COUNCIL.
09–09–99 REPORT SENT TO AGENCY.

RS:RJC:rv;wu

LEGISLATIVE COUNCIL RULES CLEARINGHOUSE REPORT

This rule has been reviewed by the Rules Clearinghouse. Based on that review, comments are reported as noted below:

1. STATUTORY AUTHORITY [s. 227.15 (2) (a)]

   Comment Attached YES ☐ NO ☑

2. FORM, STYLE AND PLACEMENT IN ADMINISTRATIVE CODE [s. 227.15 (2) (c)]

   Comment Attached YES ☑ NO ☐

3. CONFLICT WITH OR DUPLICATION OF EXISTING RULES [s. 227.15 (2) (d)]

   Comment Attached YES ☐ NO ☑

4. ADEQUACY OF REFERENCES TO RELATED STATUTES, RULES AND FORMS [s. 227.15 (2) (e)]

   Comment Attached YES ☑ NO ☐

5. CLARITY, GRAMMAR, PUNCTUATION AND USE OF PLAIN LANGUAGE [s. 227.15 (2) (f)]

   Comment Attached YES ☑ NO ☐

6. POTENTIAL CONFLICTS WITH, AND COMPARABILITY TO, RELATED FEDERAL REGULATIONS [s. 227.15 (2) (g)]

   Comment Attached YES ☐ NO ☑

7. COMPLIANCE WITH PERMIT ACTION DEADLINE REQUIREMENTS [s. 227.15 (2) (h)]

   Comment Attached YES ☐ NO ☑

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CLEARINGHOUSE RULE 99–123

Comments

[NOTE: All citations to "Manual" in the comments below are to the Administrative Rules Procedures Manual, prepared by the Revisor of Statutes Bureau and the Legislative Council Staff, dated September 1998.]

2. Form, Style and Placement in Administrative Code

a. In SECTION 1 of the rule, it is not readily apparent that the second line of text and the title are underscored. The rule should employ a different format to make it clear that those provisions are underscored. This comment applies to all amendments to tables where the underscored material is immediately followed by a line from the table.

b. SECTIONS 3 and 4 of the rule appear to define new terms. As such, the new definitions should be treated separately in the rule in their own definitional subsections. In addition, the phrases "wherever used in chs. Comm 82 and 84" is redundant and should be deleted since the definitions in s. Comm 82.11 specifically apply to chs. Comm 82 and 84. [See s. Comm 82.11 (intro.).] This comment also applies to SECTIONS 6, 7, 12, 13 and 14.

c. In s. Comm 82.20 (12), because the first sentence does not lead grammatically into the following subunits, it should be numbered as par. (a) and the remaining paragraphs should be renumbered accordingly. The same problem occurs in the paragraph currently numbered as par. (a). [See also s. Comm 82.40 (3) (d) 3.] Finally, in sub. (12) (a) 4. and (b) 4., the second sentence should read: "A violation of the conditions under which an approval is issued constitutes a violation of this chapter."

d. If the provisions of s. Comm 82.21 (3) are meant to apply to all cross connection control devices, then the sentence should be rewritten to read: "The maintenance and performance testing requirements of this subsection applies to all cross connection control

devices, regardless of the date of their installation." If the subsection is meant to apply only to those devices installed prior to the effective date of the subsection, the sentence should be rewritten to read: "The maintenance . . . applies to cross connection control devices installed prior to the effective date of this subsection .... [revisor inserts date]".

e. Because the note to s. Comm 82.31 (16) (d) 2. is being created, it need not be underscored.

f. In s. Comm 82.33 (9) (i) 4., the phrase "shall apply" should be replaced by the word "applies."

g. In s. Comm 82.40 (3) (d) 3. (intro.), the last sentence should be deleted. Instead, the effective date provision at the end of the rule-making order should be amended to note an exception to the general effective date. That is, s. Comm 82.40 (3) will take effect on the first day of the ninth month following publication in the Wisconsin administrative register.

h. Because of the extensive revisions to s. Comm 82.50 (10) (g) and (h), it is suggested that they simply be repealed and recreated.

i. In s. Comm 84.10 (4), the phrase "data indicates" should be replaced by the phrase "~~indicates~~ data indicate."

j. SECTION 49 of the rule is actually creating s. Comm 84.20 (2) (b). Therefore, the creation of par. (b) should be treated separately in a numbered section with its own treatment clause. This comment also applies to SECTIONS 53 and 65 of the rule.

k. The treatment in SECTION 52 of the rule can be made more specific so as to eliminate the necessity of printing several provisions that are not being treated. For example, s. Comm 84.20 (5) (b) 1. c., 3. and 4. are not amended and do not need to be reproduced in the rule. The treatment clause should only identify those provisions being amended and the section should not contain provisions not being amended. In addition, the deletion of par. (j) 2. should be treated separately. There is no need to renumber the remaining provisions of par. (j) after the deletion of subd. 2., but if they are to be renumbered in the manner set forth in the rule, the underscored material should follow the stricken material. Finally, the creation of par. (k) 1. e. should be treated separately.

l. The treatment clause of SECTION 53 of the rule contains no mention of amending subd. 2. It appears that it should.

m. The creation of s. Comm 84.30 (5) (c) 10. should be treated separately. When doing so, if it were located at the end of the current subdivisions, there would be no need to renumber current subds. 10. to 17.

n. Because s. Comm 84.30 (5) (c) 19. is being created, it should not be underscored.

o. SECTION 64 of the rule should be combined with SECTION 63 since they both amend various paragraphs of s. Comm 84.40 (4).

4. Adequacy of References to Related Statutes, Rules and Forms

a. It is noted that in the note to s. Comm 82.11 (104e), pars. (b) and (c) are actually numbered pars. (c) and (d) in the statutes. [See s. 50.01 (3), Stats.]

b. Section Comm 82.20 (4) (e) 1. a. refers to submitting plans detailing certain items in accordance with "sub. (4)." Since the subdivision paragraph is in sub. (4), the reference should be changed to "this subsection." If another "sub. (4)" is the intended cross-reference, a more complete cross-reference should be provided.

c. In s. Comm 82.20 (4) (e) 3., the rule calls for the department to specify time intervals for certain inspections and authorizes the assessment of a fee for each inspection. How and where will the times be specified? How much will the fee be and will it be assessed each time? These items should be specified in the rule by either a cross-reference to an existing provision, or the creation of a new provision, providing guidance on this department authority. For example, s. Comm 82.20 (12) (f) refers to fees for inspections. Would this be an appropriate cross-reference?

d. In s. Comm 82.20 (12) (b) 6., how will the department limit the number of applications it will accept? How will people know of the limit and when that limit is reached? Will this number be published in a rule or in the Wisconsin administrative register? The rule should identify where this information will be published or made available to the public.

e. Section Comm 82.21 (3) (a) refers to devices being maintained in accordance with "the appropriate standard." An appropriate cross-reference should be provided to assist readers to determine which standards are being referred to and which are the appropriate ones. For example, adding a phrase such as "as identified in this section" at the end of the paragraph would help clarify where the appropriate standards are to be found.

5. Clarity, Grammar, Punctuation and Use of Plain Language

a. In s. Comm 82.11 (6e), the phrase "that the plumbing system is in" should be inserted after the word "demonstrate" in order to adequately complete the meaning of the rule. In addition, to whom must it be demonstrated that the alternate plumbing system complies with the intent of chs. Comm 82 and 84? The department? The installer? The proposer of the alternative system? The rule should be clarified.

b. The colon at the end of s. Comm 82.11 (49s) should be deleted.

c. In s. Comm 82.11 (64s), the phrase "that the plumbing system is in" should be inserted after the word "demonstrate." In addition, by whom is the valid and reliable date being sought? Also, who determines compliance with the intent of chs. Comm 82 and 84? The rule should be clarified. Finally, is an experimental plumbing system one that clearly does not meet the letter of the Plumbing Code but is designed in such a way as to meet the intent of it? This idea should be better developed in the definition.

d. In s. Comm 82.20 (4) (e) 1. b., a copy of the experimental system approval must be submitted when requesting an approval of an experimental plumbing system. How is this done? How does one submit the approval if one is applying for it? Or is the approval to be submitted a different approval? In any event, the rule should be clarified. Also, in subd. 1. c., who is the "owner of the installation"? Does this refer to the owner of the site where the experimental system will be installed? Or does this refer to the owner of the experimental system? The rule should be clarified.

e. Section Comm 82.20 (4) (e) 4. seems to say that after five years an experimental system must be removed or changed. Is this the intent? What does it mean to issue an "alternate approval"? The rule should be clarified.

f. In s. Comm 82.20 (4) (e) 5., what does it mean for an experimental plumbing system to be recognized? Does it mean that it is no longer considered experimental? The rule should be clarified.

g. In s. Comm 82.20 (12) (a) 1., must an alternate plumbing system be approved before statewide installation? What if the system is not going to be used statewide? Must the system still gain approval? The rule should be clarified.

h. In s. Comm 82.20 (12) (b) 2., what is the review for? Is the information required by this provision necessary for review to approve the plan or to review as a follow-up? The rule should be clarified.

i. In s. Comm 82.20 (12) (c), the phrase "considered null and" is unnecessary and should be deleted.

j. In s. Comm 82.21 (3) (b) 4. b., who is the "designated authority"? According to the table, it appears that the "designated authority" is the department and purveyor. This should be made clear in the substantive provision of the rule. In addition, subd. 5. provides that the results must be made available to the department and others upon request. Why is this necessary if the test results must be submitted to the department under subd. 4. b.?

k. In s. Comm 82.36 (4), what does GPM stand for? Gallons per minute? The acronym should not be used unless it is a term defined in the rule.

l. In s. Comm 82.36 (5) (a), how is the size of horizontal drain piping "otherwise approved by the department"? This rule should be clarified. This comment also applies to s. Comm 82.36 (6) (a).

m. In s. Comm 82.50 (2), what are "related facilities"? The rule should be clarified.

STATE OF WISCONSIN
DEPARTMENT OF COMMERCE

NOTICE OF PUBLIC HEARING
AND
HEARING DRAFT OF PROPOSED RULES

NOTICE IS HEREBY GIVEN that pursuant to ss. 227.14 (4m) and 227.17, Stats., the Department of Commerce announces that it will hold public hearings on proposed rules relating to: Chs. Comm 82 and 84 Wisconsin Uniform Plumbing Code.

The public hearings will be held as follows:

Date and Time:
Wednesday, October 6, 1999
10:30 a.m.

Location:
WHEDA Conf. Rm. 3C
201 W. Washington Ave.
MADISON

Interested persons are invited to appear at the hearings and present comments on the proposed rules. Persons making oral presentations are requested to submit their comments in writing. Persons submitting comments will not receive individual responses. The hearing record on this proposed rulemaking will remain open until **October 16, 1999** , to permit submittal of written comments from persons who are unable to attend a hearing or who wish to supplement testimony offered at a hearing. Written comments should be submitted to: **Jean M. MacCubbin, Department of Commerce, Safety & Buildings Division, P.O. Box 2689, Madison, WI 53701-2689.**

These hearings are held in accessible facilities. If you have special needs or circumstances that may make communication or accessibility difficult at the hearing, please call (608) 261-6546 or TTY at (608) 264-8777 at least 10 days prior to the hearing date. Accommodations such as interpreters, English translators, or materials in audio tape format will, to the fullest extent possible, be made available upon request by a person with a disability.

A copy of the proposed rules may be obtained without cost from **Roberta Ward**, Department of Commerce, Program Development Bureau, P.O. Box 2689, Madison, Wisconsin 53701-2689; telephone **(608) 266-8741** or (608) 264-8777 (TTY). Copies will also be available at the public hearings.

State of Wisconsin \ Department of Commerce

HEARING DRAFT of PROPOSED RULES

Rule No.: Chs. Comm 82 & 84

Relating to: Wisconsin Uniform Plumbing Code

COM-10544 (N.03/97)

The Wisconsin Department of Commerce proposes an order to renumber and amend Comm 84.20 (2) as Comm 84.20 (2) (a) and (b), Comm 84.20 (5) (L) 1. to 84.20 (5) (L) 1. a. and b., Comm 84.30 (5) (c) 1. to 17. as Comm 84.30 (5) (c) 1. to 18., and Comm 84.40 (7) as Comm 84.40 (7) (a) and (b);

to amend Comm 2.64 Table 2.64-1 (partial) and Title, Comm 82.11 (17) and (80), Table 82.20-1 (partial), 82.34 (4) (b) 2., 82.36 (3) (b) 3. a., 82.36 (4) (a), 82.36 (5) (a), 82.36 (6) (a), 82.40 (8) (g), 82.40 (8) (i) 2., 82.41 (3) (a) 2., Table 82.41-2 (partial), 82.41 (4) (k), 82.50 (2), 82.50 (10) Table 26 (partial) and Title, 82.50 (10) (g) and (h), 84.10 (4), 84.20 (4) (b) 2., 84.20 (5) (b) to (e) and (i) to (k), 84.20 (5) (m), 84.20 (6) (a) and (b), 84.30 (6) (f), Tables 84.30-3 (partial), 84.30-5 (partial), 84.30-6 (partial), 84.30-8 (partial), 84.30-9 (partial), 84.30-10 (partial), and 84.30-11 (partial), 84.30 (6) (e), 84.40 (2) (c), 84.40 (3) (a), 84.40 (4) (a) and (c), 84.40 (4) (d), 84.40 (8) (a) and (d), 84.40 (9) (b), 84.40 (10) (a), 84.40 (14) (c), Tables 84.60-4 (partial), 84.60-5 (partial), 84.60-6 (partial), 84.60-7 (partial), and Table 84.60-8;

to repeal Comm 82.50 (10) (i);

to repeal and recreate Comm 82.20 (2) and (12), 82.21 (2) (a), 82.21 (3), 82.33 (9) (i), Table 82.41-1, 82.41 (4) (b), 82.41 (4) (n), 84.20 (4) (b) 9., 84.60, Tables 84.60-2 and 84.60-11, and A-84.20 Appendix; and

to create Comm 82.11 (6e), (49s), (64s), (104e), (108e), and (185e), 82.20 (4) (e), 82.21 (3) Table 82.21-1, 82.31 (16) (d) 2. Note, Comm 82.33 Table 82.33-3, Comm 82.36 Table 82.36-4a, 82.60 (2) (d), 82.40 (3) (d) 3., 84.03 (2e), 84.30 (5) (c) 19., and Tables 84.60-3e and 84.60-7e, relating to the state uniform plumbing code.

* *

<u>Analysis of Proposed Rules</u>

Statutory authority: ss. 101.02 (1), 101.63 (1), 101.73 (1), 101.82 (1) and 145.02 (3), Stats.
Statutes interpreted: ss. 145.02 (4), 145.045, 145.13, 145.135, 145.19, 145.20, Stats.

Under s. 145.02, Stats., the Department of Commerce has the responsibility of safeguarding public health and the waters of the state relative to the construction, installation and maintenance of plumbing. One mechanism of the Department to fulfill this responsibility has been the promulgation of the state uniform plumbing code, chs. Comm 82-87.

This rule revision includes changes to various definitions important to health-related occupancies so as to conform to regulations of the Department of Health and Family Services (DHFS). Other proposed revisions are in response to 1997 Wisc. Acts 27, 237 and 768 and updating administrative rules to be more contemporary within the industry by adopting more recent nationally-recognized standards.

Chapter Comm 82, the design, construction, installation, supervision and inspection of plumbing, is proposed to be revised to address conformance in definitions with Department of Health and Family Services for health-related occupancies. Section Comm 82.50 provides for methods to avoid scalding at the point of water usage, as well as providing a maximum water system temperature to reduce and/or eliminate the environment for *Legionella* bacteria in the supply water system.

The adoption of updated standards ~~would now~~ will allow the use of elliptical concrete piping for storm and clear water drain. Also, included are provisions for the Department to create a process to tag and track cross connection control devices for the purposes of maintaining cyclical testing to assure the compliant operation of these devices.

A process for submittal and review of alternate and experimental plumbing systems in s. Comm 82.20 has also been established. This will allow submittals and review of plumbing systems for statewide use on an experimental basis, similar to approvals for plumbing and building products and materials.

Section Comm 82.33 has been repealed and recreated to clarify the allowable options for swimming pool and whirlpool discharge.

Chapter Comm 84, plumbing products, is proposed to be revised to reflect the adoption of more recent nationally-recognized standards for various plumbing products-- fixtures and faucets, and piping materials, joints and fittings.

The proposed rule revisions were developed with the assistance of the Plumbing Advisory Code Council. The Plumbing Advisory Code Council consists of the following individuals: Thomas Boehnen, American Society of Plumbing Engineers; Rudy Petrowitsch, American Society of Sanitary Engineers; Gary Hamilton, State AFL-CIO; Gary Kowalke, Wisconsin Association of Plumbing, Heating, and Cooling Contractors, Inc.; Mark Krowski, City of Milwaukee; Jeff Kuhn, Plumbing and Mechanical Contractors of SE Wisconsin; Clint McCullough, Madison Contractors Association; Bob Netzler, League of Wisconsin Municipalities; Dave Viola, Plumbing Manufacturers Institute; Dale Schlieve, WI Society of Professional Designers of Engineering Systems, Inc.; and Gene Shumann, plumbing designers.

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SECTION 1. Comm 2.64 Table 2.64-1 (partial) and Title are amended to read:

Table 2.64-1
PLAN EXAMINATION FEES FOR PLUMBING SYSTEMS

13. ~~Engineered~~ Alternate plumbing systems	$400.00
19. Experimental plumbing systems	$225.00

SECTION 2. Comm 82.11 (6e) is created to read:

Comm 82.11 (6e) "Alternate plumbing system" means a type of plumbing system designed in such a manner that valid and reliable data demonstrate compliance with the intent of chs. Comm 82 and 84.

SECTION 3. Comm 82.11 (17) is amended to read:

Comm 82.11 (17) "Backflow preventer with intermediate atmospheric vent" means a type of cross connection control device which consists of ~~2~~ two independently acting check valves, internally force loaded to a normally closed position and separated by an intermediate chamber with a means for automatically venting to atmosphere, the venting means is internally force loaded to a normally open position. The term "dual check valve type with atmospheric vent backflow preventer" wherever used in chs. Comm 82 and 84, has the same meaning as backflow preventer with intermediate atmospheric vent.

SECTION 4. Comm 82.11 (18m) is amended to read:

Comm 82.11 (18m) "Back siphonage backflow vacuum breaker" means a type of cross connection control device which contains a check valve force-loaded closed and an air inlet vent valve force-loaded open to atmosphere, positioned downstream of the check valve, and located between and including 2 tightly closing shut-off valves and 2 test cocks. The term "SVB" wherever used in chs. Comm 82 and 84, has the same meaning as back siphonage backflow vacuum breaker.

SECTION 5. Comm 82.11 (49s) is created to read:

Comm 82.11 (49s) "Community-based residential facility" has the meaning specified under s. 50.01 (1g), Stats.:

Note: Section 50.01 (1g), Stats., reads: "Community-based residential facility" means a place where 5 or more adults who are not related to the operator or administrator and who do not require care above intermediate level nursing care reside and receive care, treatment or services that are above the level of room and board but that include no more than 3 hours of nursing care per week per resident. "Community-based residential facility" does not include any of the following:

(a) A convent or facility owned or operated by members of a religious order exclusively for the reception and care or treatment of members of that order.

(b) A facility or private home that provides care, treatment and services only for victims of domestic abuse, as defined in s. 46.95 (1) (a), Stats., and their children.

(c) A shelter facility as defined under s. 16.352 (1) (d), Stats.

(d) A place that provides lodging for individuals and in which all of the following conditions are met:

1. Each lodged individual is able to exit the place under emergency conditions without the assistance of another individual.

2. No lodged individual receives from the owner, manager or operator of the place or the owner's, manager's or operator's agent or employe any of the following:

a. Personal care, supervision or treatment, or management, control or supervision of prescription medications.

b. Care or services other than board, information, referral, advocacy or job guidance; location and coordination of social services by an agency that is not affiliated with the owner, manager or operator, for which arrangements were made for an individual before he or she lodged in the place; or, in the case of an emergency, arrangement for the provision of health care or social services by an agency that is not affiliated with the owner, manager or operator.

(e) An adult family home.

(f) A residential care apartment complex.

(g) A residential facility in the village of Union Grove that was authorized to operate without a license under a final judgment entered by a court before January 1, 1982, and that continues to comply with the judgment notwithstanding the expiration of the judgment.

SECTION 6. Comm 82.11 (60m) is amended to read:

Comm 82.11 (60m) "Double check backflow prevention assembly" means a type of cross connection control device which is composed of 2 independently acting check valves internally force loaded to a normally closed position, tightly closing shut-off valves located at each end of the assembly and fitted with test cocks. The terms "backflow preventer, double check valve type" or "DCV" wherever used in chs. Comm 82 and 84, have the same meaning as double check backflow prevention assembly.

SECTION 7. Comm 82.11 (60n) is amended to read:

Comm 82.11 (60n) "Double check detector assembly backflow preventer" means a type of a double check backflow prevention assembly which includes a parallel flow meter to indicate leakage or unauthorized use of water downstream of the assembly. The term "DCV detector " wherever used in chs. Comm 82 and 84, has the same meaning as double check detector assembly backflow preventer.

SECTION 8. Comm 82.11 (64s) is created to read:

Comm 82.11 (64s) "Experimental plumbing system" means a type of plumbing system from which valid and reliable data are being sought to demonstrate compliance with the intent of chs. Comm 82 and 84.

SECTION 9. Comm 82.11 (80) is amended to read:

Comm 82.11 (80) "Health care facility" means any building or part of a building used for purposes such as a ~~hospitals, nursing or rest homes, homes for the aged, infirmaries, residential care facilities, sanitariums, mortuaries, medical laboratories, and offices and clinics~~ hospital, nursing home, community-based residential facility, sanitarium, inpatient hospice where only respite care is provided, medical laboratory, and office or clinic that includes an operatory ~~with operatories~~ for dentists ~~and~~ or doctors.

SECTION 10. Comm 82.11 (104e) is created to read:

Comm 82.11 (104e) "Nursing home" has the meaning specified under s. 50.01(3), Stats.

Note: Section 50.01(3), Stats., reads: "Nursing home" means a place where 5 or more persons who are not related to the operator or administrator reside, receive care or treatment and, because of their mental or physical condition require access to 24-hour nursing services, including limited nursing care, intermediate level nursing care and skilled nursing services. "Nursing home" does not include any of the following:

(b) A convent or facility owned or operated exclusively by and for members of a religious order that provides reception and care or treatment of an individual.

(c) A hospice, as defined in s. 50.90 (1), Stats., that directly provides inpatient care.

(e) A residential care apartment complex.

SECTION 11. Comm 82.11 (108e) is created to read:

Comm 82.11 (108e) "Patient area plumbing fixture" means a plumbing fixture that is accessible to patients in a health care facility and is intended to be used for culinary, hygienic or domestic purposes.

SECTION 12. Comm 82.11 (117h) is amended to read:

Comm 82.11 (117h) "Pressure vacuum breaker assembly" means a type of cross connection control device which consists of an independently operating internally loaded check valve and an independently operating loaded air inlet located on the discharge side of the check valve, a tightly closing shut-off valve located at each end of the assembly, and test cocks. The terms "vacuum breaker, pressure type" or "PVB"" wherever used in chs. Comm 82 and 84, have the same meaning as pressure vacuum breaker assembly.

SECTION 13. Comm 82.11 (125m) is amended to read:

Comm 82.11 (125m) "Reduced pressure detector backflow preventer" means a type of reduced pressure principle type backflow preventer which includes a parallel flow meter to indicate leakage or unauthorized use of water downstream of the assembly. The term "RP detector " wherever used in chs. Comm 82 and 84, has the same meaning as reduced pressure detector backflow preventer.

SECTION 14. Comm 82.11 (126) is amended to read:

Comm 82.11 (126) "Reduced pressure principle type backflow preventer" means a type of cross connection control device which contains 2 independently acting check valves, separated by an intermediate chamber or zone in which there is a hydraulically operated means for venting to atmosphere, and includes 2 shut-off valves and 4 test cocks. . The terms "backflow preventer, reduced pressure principle type" or "RP" wherever used in chs. Comm 82 and 84, have the same meaning as reduced pressure principle type backflow preventer.

SECTION 15. Comm 82.11 (185e) is created to read:

Comm 82.11 (185e) "Whirlpool" has the meaning specified under s. Comm 90.03 (11) (k).

Note: Section Comm 90.03 (11) (k) reads: "Whirlpool" means a relatively small pool which uses high temperature water and which may include a water agitation system. A "whirlpool" is sometimes called a spa.

Note: A fill and dump bathtub is not a whirlpool.

SECTION 16. Comm 82.20 (4) (e) is created to read:

Comm 82.20 (4) (e) 1. When requesting approval of an experimental plumbing system, all of the following shall be submitted:

a. Plans detailing the system installation for each site in accordance with ~~sub. (4).~~

b. A copy of the experimental system approval.

c. A letter of consent from the owner of the installation. The letter shall acknowledge that the owner has received and read a copy of the experimental plumbing system submittal and is in agreement with all requirements listed within this subdivision.

2. The registered architect, engineer, designer or master plumber responsible for the design of the experimental plumbing system shall, upon completion, certify in writing to the department that the installation is in compliance with the approved plans, specifications and data.

3. Onsite inspections shall be performed by the department at time intervals as specified by the department, but not less than once a year. An inspection report shall be written. The department may assess a fee for each inspection.

4. Five years after the date of the completed installation the department shall order the removal of the experimental plumbing system or issue an alternate approval for the system within six months.

5. If an experimental plumbing system is subsequently recognized in chs. Comm 82 and 84, or ch. 145, Stats., the requirements as specified in subds. 3. and 4. do not apply.

SECTION 17. Comm 82.20 (11) is repealed and recreated to read:

Comm 82.20 (11) PETITION FOR VARIANCE. The department shall consider and may grant a variance to a provision of this chapter in accordance with ch. Comm 3.

Note: Chapter Comm 3 requires the submittal of a petition for variance form (SBD-9890) and a fee, and that an equivalency is established in the petition for variance that meets the intent of the rule being petitioned. Chapter Comm 3 also requires the department to process regular petitions within 30 business days and priority petitions within 10 business days.

Note: Form SBD-9890 is available at no charge from the department at the Safety and Buildings Division, P.O. Box 2509, Madison WI 53701, telephone 608/266-1818.

SECTION 18. Comm 82.20 (12) is repealed and recreated to read:

Comm 82.20 (12) ALTERNATE AND EXPERIMENTAL PLUMBING SYSTEM REVIEW AND APPROVAL. The provisions of this chapter, ch. Comm 84 or ch. 145, Stats., are not intended to prevent the design and use of innovative plumbing systems, if the system designs have first been approved by the department.

(a) *Alternate plumbing systems.* The department may issue an approval of an alternate plumbing system if the system complies with the intent of chs. Comm 82 and 84, or ch. 145, Stats.

1. For an alternate plumbing system, an approval shall be required before statewide installation and use. Concepts, plans, specifications and the documentation to support the system design shall be submitted to the department for review.

2. The department may require the submission of any information deemed necessary for review. Sufficient evidence shall be submitted to substantiate at least the following:

a. Assertions of function and performance.

b. Compliance with the intent of chs. Comm 82 and 84, or ch. 145, Stats.

3. The department shall review and make a determination on an application for alternate plumbing system within 3 months of receipt of all information and fees required to complete the review. Approval for an alternate plumbing system shall be issued by the department in writing.

4. The department may include specific conditions in issuing an approval for an alternate plumbing system, including an expiration date for the approval. Violations of the conditions under which an approval is issued ~~shall~~ constitute a violation of this chapter.

5. If upon review the department determines that an alternate plumbing system does not comply with the intent of chs. Comm 82 and 84, or ch. 145, Stats., the request for approval shall be denied in writing.

(b) *Experimental plumbing systems.* The department may issue an approval of an experimental plumbing system for the purpose of proving compliance with the intent of chs. Comm 82 and 84 and ch. 145, Stats.

1. For an experimental plumbing system, a separate approval shall be obtained for each system or project to be installed for the purpose of proving compliance with the intent of chs. Comm 82 and

84 and ch. 145, Stats. Approval for an experimental plumbing system shall be issued by the department in writing.

2. The department may require the submission of any information deemed necessary for review. – in writ to approve ? or follow-up?

3. The department shall review and make a determination on an application for an experimental plumbing system within 6 months of receipt of all information and fees required to complete the review.

4. The department may include specific conditions in issuing an approval for an experimental plumbing system, including an expiration date for the approval. Violations of the conditions under which an approval is issued ~~shall~~ constitute a violation of this chapter.

5. Denial of an experimental plumbing system or project by the department shall be made in writing.

6. The department may limit the number of applications for review it will accept for experimental plumbing systems. — when/when will it be tier – should be – a rule – published somewhere

(c) *Modification.* If an approved alternate or experimental plumbing system is modified or additional assertions of function or performance are made, the approval shall be considered null and void, unless the system is resubmitted to the department for review and approval is granted.

(d) *Revocation of approval.* The department may revoke an approval issued under this section for any false statements or misrepresentations of facts or data on which the approval was based, or as a result of system failure.

(e) *Limitations.* An approval issued by the department for an alternate or experimental plumbing system may not be construed as an assumption of any responsibility for defects in design, construction or performance of any system nor for any damages that may result.

(f) *Fees.* Fees for the review of an alternate or experimental plumbing system under this section and any onsite inspections shall be submitted in accordance with ch. Comm 2.

SECTION 19. Comm 82.20 Table 82.20-1 (partial) is amended to read:

Table 82.20-1
SUBMITTALS TO DEPARTMENT

Type of Plumbing Installation
4. ~~Engineered~~ Alternate and experimental plumbing systems.

SECTION 20. Comm 82.21 (2) (a) is repealed and recreated to read:

Comm 82.21 (2) (a) *Existing systems.* 1. Except as specified in subd. 2., any existing plumbing system shall be permitted to remain and maintenance continue if the maintenance is in accordance with the original system design and any of the following apply:

a. The plumbing system was installed in ~~accordance with~~ the code in effect at the time of installation.

b. The plumbing system conforms to the present code.

c. The department provides written approval for the plumbing system to continue to remain.

2. When a hazard to life, health or property exists or is created by an existing system, that system shall be repaired or replaced.

SECTION 21. Comm 82.21 (3) is repealed and recreated to read:

Comm 82.21 (3) MAINTENANCE AND TESTING OF CROSS CONNECTION CONTROL DEVICES. (a) All cross connection control devices shall be maintained in accordance with the appropriate standard.

(b) 1. A performance test shall be conducted for the devices listed in Table 82.21-1 at all of the following intervals:

a. At the time of installation.

b. Immediately after repairs or alterations to the device have occurred.

c. At least annually.

2. The performance test shall be conducted using the appropriate test standard for the device as specified in Table 82.21-1.

3. A cross connection device performance test shall be conducted by an individual registered by the department in accordance with s. Comm 5.99.

4. a. The results of the cross connection device performance test shall be submitted as specified in Table 82.21-1 in a format prescribed by the department.

Note: Test results shall be submitted on the Cross Connection Control Device Performance Test form (SBD-9927), available from the department at: Safety and Buildings Division, PO Box 7302, Madison WI 53707-7302; Fax (608) 267-0592.

b. As specified in Table 82.21-1, the results of the cross connection device performance test shall be submitted to the designated authority within 60 days of completion of the test.

5. The results of performance tests for the devices listed in Table 82.21-1 shall be made available upon request to the department, its agent, or the governmental unit.

(c) The maintenance and performance testing requirements of this subsection ~~shall also apply~~ to those cross connection control devices installed prior to the effective date of this subsection.

SECTION 22. Comm 82.21 Table 82.21-1 is created to read:

Table 82.21-1
Testing and Submitting Requirements for Cross Connection Control Devices

Industry Common Name of Assembly	ASSE Standard Name	CAN/CSA Standard Name and Number	ASSE Test Standard	Test Results Submitted To Department and Purveyor
RP	Reduced pressure principle backflow preventer ASSE 1013	Backflow preventer, reduced pressure principle type (RP) CAN/CSA-B64.4-94	5010-1013-1	Yes
RP Detector	Reduced pressure detector backflow preventer ASSE 1047		5010-1047-1	Yes
PVB	Pressure vacuum breaker assembly ASSE 1020	Vacuum breaker, pressure type (PVB) CAN/CSA-B64.1.2-94	5010-1020-1	Yes
SVB	Backsiphonage backflow vacuum breaker ASSE 1056		Per department approved guidelines	Yes
DCV	Double check backflow prevention ASSE 1015	Backflow preventer, double check valve type (DCVA) CAN/CSA-B64.5-94	5010-1015-1, 5010-1015-2, 5010-1015-3, 5010-1015-4	No[1]
DCV detector	Double check detector assembly backflow preventer ASSE 1048		5010-1048-1, 5010-1048-2, 5010-1048-3, 5010-1048-4	No[1]

[1] The results of the performance test shall be maintained at the site where the device is installed.

SECTION 23. Comm 82.31 (16) (d) 2. Note is created to read:

Note: Section Comm 64.57 (2) (a) adopts the American Institute of Architects (AIA) "Design and Construction of Hospital and Health Care Facilities" that includes greater vent terminal to air intake distances. These guidelines are available from AIA, phone 1-800-365-2724.

SECTION 24. Comm 82.33 (9) (i) is repealed and recreated to read:

Comm 82.33 (9) (i) *Swimming pools.* 1. The backwash and drain wastewater from a swimming pool, wading pool or whirlpool shall discharge in accordance with Table 82.33-3.

2. The discharge from interior deck drains shall be directed to the sanitary sewer via an air-gap.

3. The discharge from exterior deck drains shall be directed to the storm sewer via an air-gap.

4. The requirements for sewer connections as specified in ch. Comm 90 ~~shall apply~~ to all public swimming pools.

SECTION 25. Comm 82.33 Table 82.33-3 is created to read:

Table 82.33-3
ALLOWABLE DISCHARGE POINTS
FROM SWIMMING POOLS, WADING POOLS AND WHIRLPOOLS

Discharge Type	Private Sewage System	Sanitary Sewer	Municipal Storm Sewer	Ground Surface Storm
1. Swimming or Wading Pool, diatomaceous earth backwash	X[a]	X		
2. Swimming or Wading Pool, drain wastewater	X[a]	X[c]	X[b & d]	X[b & d]
3. Swimming or Wading Pool, sand filter backwash	X[a]	X[c]	X[b & d]	X[b & d]
4. Whirlpool, backwash and drain wastewater	X[a]	X[c]		

[a] Allowed when the private sewage system is designed to include pool wastewater.
[b] Allowed with permission of the local municipality.
[c] Allowed if local municipal treatment plant will accept pool wastewater.
[d] Allowed with permission of the department of natural resources.

SECTION 26. Comm 82.34 (4) (b) 2. is amended to read:

Comm 82.34 (4) (b) 2. Catch basins serving garages for one- and 2-family dwellings shall be designed and installed in accordance with par. (a) 2.

SECTION 27. Comm 82.36 (3) (b) 3. a. is amended to read:

Comm 82.36 (3) (b) 3. a. The clear water wastes from a drinking fountain, water heater relief valve, storage tank relief valve, ~~or~~ water softener, iron filter, municipal well pump house floor drain, one- and 2-family garage or covered parking structure shall be discharged to either a sanitary drain system or a storm drain system.

SECTION 28. Comm 82.36 (4) (a) is amended to read:

Comm 82.36 (4) LOAD ON DRAIN PIPING. (a) Storm water drainage. The load factor on storm water drain piping shall be computed in terms of gallons per minute or on the square footage of the horizontal projection of roofs, paved areas, yards and other tributary areas based on a minimum of 3.7 inches per hour and the surface area to GPM conversion factors in Tables 82.36-1 to 82.36-3.

SECTION 29. Comm 82.36 (5) (a) is amended to read:

Comm 82.36 (5) SELECTING SIZE OF STORM AND CLEAR WATER DRAIN PIPING. (a) Horizontal storm water drain piping. The pipe size for horizontal drain piping for storm water shall be determined from Tables 82.36-1 to 82.36-4a, or as otherwise approved by the department.

SECTION 30. Comm 82.36 Table 82.36-4a is created to read:

Table 82.36-4a
MAXIMUM CAPACITY OF STORM WATER HORIZONTAL DRAIN PIPING FLOWING FULL FOR ELIPTICAL REINFORCED CONCRETE PIPE

Pipe Diameters in Inches (circular pipe equivalent)	Maximum Capacities (in gallons per minute) Pitch of Piping Per Foot			
	1/16 inch	1/8 inch	1/4 inch	1/2 inch
14 X 23 (18)	3,300	4,675	6,700	9,500
19 X 30 (24)	7,200	10,060	14,700	21,000
24 X 38 (30)	13,250	18,740	26,500	37,475
29 X 45 (36)	21,545	30,475	43,095	60,940
34 X 53 (42)	32,500	45,965	65,000	91,925
38 X 60 (48)	46,405	65,625	92,800	131,245
43 X 68 (54)	63,525	89,840	127,050	179,800
48 X 76 (60)	84,135	118,985	168,270	237,965

SECTION 31. Comm 82.36 (6) (a) is amended to read:

Comm 82.36 (6) (a) *Storm water drain piping.* The minimum pitch of horizontal drain piping shall be in accordance with Tables 82.36-1 to 82.36-4a, or as otherwise approved by the department.

SECTION 32. Comm 82.40 (3) (d) 3. is created to read:

Comm 82.40 (3) (d) 3.a. The installation of each reduced pressure principle backflow preventer, reduced pressure detector backflow preventer, pressure vacuum breaker assembly, and back siphonage backflow vacuum breaker shall display a department assigned identification number. The provisions of this subdivision shall take effect [revisor to add date, 6 months from effective date of this rule].

a. The method to display the department assigned identification number shall be a weather-resistant tag, securely attached to the cross connection control device.

b. The tag shall contain at least the following information.

Wisconsin Department of Commerce Identification/Object Number _____ Cross Connection Control Device Do Not Remove This Tag

c. The department assigned identification number shall be printed in the blank area with a permanent, waterproof marker or similar indelible method.

Note: To obtain a department assigned identification number for a cross connection control device, contact the department at: Department of Commerce; Safety and Buildings Division; P.O. Box 7302; Madison, Wisconsin 53707-7302; Phone (608) 266-0521; Fax (608) 267-0592; TTY (608) 264-8777.

SECTION 33. Comm 82.40 (8) (g) is amended to read:

Comm 82.40 (8) (g) *Temperature control.* The water temperature to all showers in public buildings shall be controlled by thermostatic mixing valves or by individually controlled pressure balanced mixing valves. A thermostatic or pressure balanced mixing valve may not be bypassed.

SECTION 34. Comm 82.40 (8) (i) 2. is amended to read:

Comm 82.40 (8) (i) 2. New private water mains and extensions to private water mains shall be disinfected prior to use in accordance with AWWA ~~C601~~ C651 or the following method:

SECTION 35. Comm 82.41 (3) (a) Table 82.41-1 is repealed and recreated to read:

Table 82.41-1
ACCEPTABLE CROSS CONNECTION CONTROL METHODS FOR SPECIFIC APPLICATIONS

TYPES or METHODS of CROSS CONNECTION CONTROL (Standard)	SITUATIONS and CONDITIONS							
	Backpressure				Backsiphonage			
	Low Hazard		High Hazard		Low Hazard		High Hazard	
	Contin-uous Pressure	Noncon-tinuous Pressure	Contin-uous Pressure	Noncon-tinuous Pressure	Contin-uous Pressure	Noncon-tinuous Pressure	Contin-uous Pressure	Noncon-tinuous Pressure
Air Gaps (ASME A112.1.2)	X	X	X	X	X	X	X	X
Atmospheric Type Vacuum Breaker (CAN/CSA B64.1.1)						X		X
Back Siphonage Vacuum Breaker (ASSE 1056)					X	X	X	X
Backflow Preventers with Intermediate Atmospheric Vent (ASSE 1012)	X	X			X	X		
Barometric Loops					X	X	X	X
Dual Check Type with Atmospheric Port Backflow Preventer (CAN/CSA B64.3)	X	X			X	X		
Hose Connection Backflow Preventers (ASSE 1052)	X[a]	X	X[a]	X	X[a]	X	X[a]	X
Hose Connection Type Vacuum Breakers (CAN/CSA B64.2.1 and B64.2.2)	X[a]	X	X[a]	X	X[a]	X	X[a]	X
Hose Connection Vacuum Breakers (ASSE 1011)	X[a]	X	X[a]	X	X[a]	X	X[a]	X
Pipe Applied Atmospheric Type Vacuum Breakers (ASSE 1001)						X		X
Pressure Type Vacuum Breaker (CAN/CSA B64.1.2)					X	X	X	X
Pressure Vacuum Breaker Assembly (ASSE 1020)					X	X	X	X
Reduced Pressure Principle Backflow Preventers (ASSE 1013)	X	X	X	X	X	X	X	X
Reduced Pressure Principle Type Backflow Preventer (CAN/CSA B64.4)	X	X	X	X	X	X	X	X

[a] See limitation under sub. (4) (c) 1. a.

SECTION 36. Comm 82.41 (3) (a) Table 82.41-2 (partial) is amended to read:

Table 82.41-2
ACCEPTABLE CROSS CONNECTION CONTROL METHODS FOR SPECIFIC APPLICATIONS

Types or Methods of Cross Connection Control (Standard)	Types of Application or Use
Double Check Backflow Prevention Assemblies (ASSE 1015)	Automatic fire sprinkler systems and standpipe systems
Double Check Valve Type Backflow Preventer (CAN/CSA B64.5)	Automatic fire sprinkler systems and standpipe systems
Laboratory Faucet Backflow Preventer (ASSE 1035)	Laboratory faucets
Laboratory Faucet Type Vacuum Breaker (CAN/CSA B64.7)	Laboratory faucets

SECTION 37. Comm 82.41 (3) (a) 2. is amended to read:

Comm 82.41 (3) (a) 2. For the situations described in par. (b) 3., cross connection control shall be provided as part of the fixture fitting outlet or in the water supply piping for the fixture fitting outlet.

SECTION 38. Comm 82.41 (4) (b) is repealed and recreated to read:

Comm 82.41 (4) (b) A pipe applied atmospheric type vacuum breaker shall be installed such that the bottom of the device or the critical level mark on the device is at least 6 inches above all of the following:

1. The flood level rim of the receptor serving the water supply port.

2. The highest point downstream from the device where backpressure would be created.

3. The highest point of an injection or aspiration port.

SECTION 39. Comm 82.41 (4) (k) 1. is amended to read:

Comm 82.41 (4) (k) 1. ~~An anti-siphon,~~ A pressure type vacuum breaker shall be installed such that the bottom of the device or the critical level mark on the device is at least 12 inches above all of the following:

a. The flood level rim of the receptor serving the water supply port~~; and~~.

b. The highest point downstream from the device where backpressure would be created.

c. The highest point of an injection or aspiration port.

SECTION 40. Comm 82.41 (4) (n) is repealed and recreated to read:

Comm 82.41 (4) (n) A back siphonage vacuum breaker shall be installed so that the bottom of the device or the critical level mark on the device is at least 12 inches above all of the following:

1. The flood level rim of the receptor serving the water supply port.

2. The highest point downstream from the device where back pressure would be created.

3. The highest point of an injection or aspiration port.

SECTION 41. Comm 82.41 (5) (a) is amended to read:

Comm 82.41 (5) INSTALLATION. (a) An air gap for cross connection control shall conform to ~~ANSI~~ ASME A112.1.2.

SECTION 42. Comm 82.50 (2) is amended to read:

Comm 82.50 (2) SCOPE. The scope of this section shall ~~cover~~ devices, fixtures and equipment which are installed and maintained in health care and related facilities ~~such as hospitals, nursing or rest homes, homes for the aged, infirmaries, residential care facilities, orphanages, sanitariums, sanatoriums, clinics, mortuaries, and schools of medicine, surgery, dentistry, and research and testing laboratories whether enumerated or not. This section may also apply to offices and clinics of dentists and doctors~~.

SECTION 43. Comm 82.50 (10) (g) to (h) are amended to read:

Comm 82.50 (10) (g) *Hot water supply control.* 1. "Health care and related facilities." a. The maximum temperature to fixture fitting outlets accessible to patients located in health care and related facilities shall not exceed 115°F.

b. The maximum temperature to other fixture fitting outlets shall not exceed 140°F.

2. "Hospitals, community-based residential facilities, inpatient hospices and nursing homes." Hot water ~~supply~~ to patients' showers, therapeutic equipment, and ~~continuous~~ all types of baths located in hospitals, community-based residential facilities, inpatient hospices and nursing homes shall be provided with control valves which automatically ~~regulating~~ regulate the temperature of the water supply to the fixture within a temperature range of 110°F to 115°F. ~~The valve~~ Such control valves shall ~~fail in a closed position~~ close completely when the tempered water supply to the fixture fitting outlet exceeds ~~110°F~~ 115°F.

(h) *Hot water supply.* The water ~~supply~~ distribution system shall be designed to provide hot water ~~at each applicable fixture at all times~~ not to exceed the maximum temperature listed in Table 26. ~~The system shall be of a circulating type. The circulating pumps shall be arranged for continuous operation or shall be controlled by an aquastat in the circulating piping. See s. Comm 82.40 (4) (f).~~

SECTION 44. Comm 82.50 (10) (g) Table 26 (partial) and Title are amended to read:

Table 26
SYSTEM TEMPERATURE

	Patient ~~Areas~~ Area	Clinical	Dietary	Laundry ~~(2 gals. per lb. of laundry)~~
~~Gal/hr/bed~~	~~6 1/2~~	~~6 1/2~~	4	~~4 1/2~~
System Temp. °F. (Maximum)	~~110°~~ 140°	~~125°~~ 140°	180°	180°

SECTION 45. Comm 82.50 (10) (i) is repealed:

SECTION 46. Comm 82.60 (2) (d) is created to read:

Comm 82.60 (2) (d) Shower valves and water distribution piping from the shower valve to the shower head outlet shall be securely attached to the structure.

SECTION 47. Comm 84.03 (2e) is created to read:

Comm 84.03 (2e) "Lead-free" means a chemical composition equal to or less than 0.2% of lead.

SECTION 48. Comm 84.10 (4) is amended to read:

Comm 84.10 (4) REVOCATION. The department may revoke any approval ~~or listing~~ issued under this section for any false statements or misrepresentation of facts ~~data~~ on which ~~the~~ approval ~~or listing~~ was based, or as a result of the product's failure, or if ~~future information~~ data indicates ~~a potential~~ health hazard or ~~potential~~ threat to the waters of the state.

SECTION 49. Comm 84.20 (2) is renumbered Comm 84.20 (2) (a) ~~and (b) and~~ amended to read:

Comm 84.20 (2) MATERIALS. (a) Plumbing fixtures shall have smooth surfaces ~~which~~ that are impervious to water.

(b) All plumbing fixture fittings covered by the scope of NSF 61, section 9 and installed to supply water intended for human ingestion shall conform to NSF 61, section 9.

SECTION 50. Comm 84.20 (4) (b) 2. is amended to read:

Comm 84.20 (4) (b) 2. "Securing wall mounted fixtures." Wall mounted fixtures shall be rigidly supported by a hanger which is attached to structural members so that the load is not transmitted to the fixture drain connection or any other part of the plumbing system. The hanger for a wall mounted water closet shall conform to ~~ANSI~~ ASME A112.6.1M.

SECTION 51. Comm 84.20 (4) (b) 9. is repealed and recreated to read:

Comm 84.20 (4) (b) 9. 'Safing.' a. The floor of all site-constructed shower stalls and shower rooms shall be protected with a safing material installed beneath the finished floor of the entire enclosure or room and upward along the sides to a minimum of 6 inches above the curb or maximum water level of the room or enclosure. The corners of the enclosure or room shall be safed to a height of 6 feet and at least 3 inches in each direction from the corners.

b. All floor drains, receptors or other similar fixtures shall be installed with a safing material extending a minimum of 30 inches from the wall of the fixture and upward to a height of 6 inches above the curb or maximum water level of the fixture on any vertical wall located within 18 inches of the fixture.

c. Prefabricated fixtures and all installations directly over an unexcavated portion of a building are exempt from safing requirements.

d. The safing material shall conform to s. Comm 84.30 (6).

e. The safing material shall be properly drained.

SECTION 52. Comm 84.20 (5) (b) to (e) and (i) to (k) are amended to read:

Comm 84.20 (5) (b) *Bathtubs.* 1. a. Enameled cast iron bathtubs shall conform to ~~ANSI~~ ASME A112.19.1M.

b. Porcelain enameled formed steel bathtubs shall conform to ~~ANSI~~ ASME A112.19.4.

c. Plastic bathtubs shall conform to ANSI Z124.1.

2. Bathtubs shall have waste outlets and overflows at least 1-1/2 inches in diameter. A ~~pop-up stopper or other~~ closing device shall be provided on the waste outlet.

3. All whirlpool piping for bathtubs shall drain by gravity to the trap serving the bathtub.

4. All waterways of the whirlpool pump for a bathtub shall drain by gravity to the trap serving the bathtub.

(c) *Bidets.* Vitreous china bidets shall conform to the material requirements in ~~ANSI~~ ASME A112.19.2M.

1. A bidet may not be located closer than 15 inches from its center to any side wall, partition, vanity or other obstruction, nor closer than 30 inches center to center from a water closet.

2. Bidets with submerged inlet fittings shall be protected by vacuum breakers which conform to ASSE 1001 or CAN/CSA B64.1.1.

(d) *Dishwashing machines.* 1. Residential type dishwashing machines shall conform to ASSE 1006.

2. Commercial type dishwashing machines shall conform to ASSE 1004.

(e) *Drinking fountains.* 1. Drinking fountains and water coolers shall conform to ARI 1010 or ~~ANSI~~ ASME A112.19.2M.

2. Drinking fountains may not be installed in toilet rooms.

3. The water supply for drinking fountains shall be provided with an adjustable valve fitted with a loose key or an automatic self-closing valve permitting regulation of the rate of flow of water. The water supply issuing from the nozzle shall be of sufficient volume and height so that persons using the fountain need not come in direct contact with the nozzle or orifice.

4. A drinking fountain may not have a waste outlet less than 1-1/4 inches in diameter.

(i) *Lavatories.* 1. a. Enameled cast iron lavatories shall conform to ~~ANSI~~ ASME A112.19.1M.

b. Vitreous china lavatories shall conform to ~~ANSI~~ ASME A112.19.2M.

c. Stainless steel lavatories shall conform to ~~ANSI~~ ASME A112.19.3.

d. Porcelain enameled formed steel lavatories shall conform to ~~ANSI~~ ASME A112.19.4.

e. Plastic lavatories shall conform to ANSI Z124.3.

2. Cultured marble vanity tops with an integral lavatory shall conform to ANSI Z124.3.

3. Lavatories shall have waste outlets not less than 1-¼ inches in diameter.

(j) *Showers.* 1. Prefabricated plastic showers and shower compartments shall conform to ANSI Z124.2.

~~2. Water distribution piping from the shower valve to the shower head outlet shall be securely attached to the structure.~~

2~~3~~. Except for combination bathtub-shower units, waste outlets serving showers shall be at least 2 inches in diameter and shall have removable strainers of sufficient strength for the anticipated loads.

3~~4~~. Where a waste outlet serves more than one shower space or shower head, the waste outlet shall be at least 2 inches in diameter and the waste outlet shall be so located and the floor so pitched that waste water from one shower does not flow over the floor area serving another shower.

Note: Section Comm 52.60 (5) (a) specifies slip-resistant requirements for shower rooms and compartments in public buildings and places of employment.

4~~5~~. All shower compartments, regardless of shape, shall have a minimum finished interior of 900 square inches and shall be capable of encompassing a circle with a diameter of 30 inches. The minimum required area and dimension shall be measured in a horizontal plane 24 inches above the top of the threshold and may not extend beyond the centerline of the threshold. The minimum area and dimensions shall be maintained to a point 70 inches above the shower waste outlet with no protrusions other than the fixture valve or valves, showerheads, soap dishes, retractable seats and safety grab bars or rails.

Note: See Appendix for further explanatory materials.

(k) *Sinks.* 1. a. Enameled cast iron sinks shall conform to ~~ANSI~~ ASME A112.19.1M.

b. Vitreous china sinks shall conform to ~~ANSI~~ ASME A112.19.2M.

c. Stainless steel sinks shall conform to ~~ANSI~~ ASME A112.19.3.

d. Porcelain enameled formed steel sinks shall conform to ~~ANSI~~ ASME A112.19.4.

e. Plastic sinks shall conform to ANSI Z124.6.

2. Sinks shall be provided with waste outlets not less than ~~11/2~~ 1 - 1/2 inches in diameter. ~~Sinks on which a food grinder is installed shall have a waste opening not less than 3-½ inches in diameter.~~

SECTION 53. Comm 84.20 (5) (L) 1. is renumbered Comm 84.20 (5) (L) 1. a. and b. and amended to read:

Comm 84.20 (5) (L) Urinals. 1. a. Vitreous china urinals shall conform to ~~ANSI~~ ASME A112.19.2M-~~90~~ and A112.19.6-~~90~~.

b. Plastic urinals shall conform to ANSI Z124.9 and ASME A112.19.6.

2. A urinal may not be located closer than ~~16~~ 15 inches from its center to any side wall, partition, vanity or other obstruction, nor closer than 30 inches center to center, between urinals. When the space between stall type urinals or a stall type urinal and a side wall is less than 12 inches, the space shall be filled flush with the front and top of the urinal with nonabsorbent material.

SECTION 54. Comm 84.20 (5) (m) is amended to read:

Comm 84.20 (5) (m) *Water closets.* 1. a. Vitreous china water closets shall conform to ~~either ANSI A112.19.2M-82 or~~ ASME A112.19.2M-~~90~~ and ~~ANSI~~ A112.19.6-~~90~~.

SECTION 55. Comm 84.20 (6) (a) and (b) are amended to read:

Comm 84.20 (6) FAUCETS, SPOUTS AND FIXTURE SUPPLY CONNECTORS. (a) Except for circular and semi-circular wash fountains, all faucets and showerheads shall conform to ~~ANSI~~ ASME A112.18.1M or CAN/CSA B125.

(b) Circular and semi-circular wash fountains shall conform to the working pressure, burst pressure, discharge rate and product marking requirements of ~~ANSI~~ ASME A112.18.1M or CAN/CSA B125.

SECTION 56. Comm 84.30 (5) (c) 1. to 17. is renumbered Comm 84.30 (5) (c) 1. to 18. and amended to read:

Comm 84.30 (5) (c) *Special fittings and valves.* 1. Water hammer arrestors shall conform to ~~ANSI~~ ASME A112.26.1 or ASSE 1010.

2. Relief valves and automatic gas shutoff devices for hot water supply systems shall conform to ANSI Z21.22.

3. Backwater valves shall conform to ~~ANSI~~ ASME A112.14.1, CAN/CSA B181.1 or CAN/CSA B181.2.

4. Pipe applied atmospheric type vacuum breakers shall conform to ASSE 1001, and CAN/CSA B64.1.1.

5. Water pressure reducing valves and strainers for water pressure reducing valves for domestic water supply systems shall conform to ASSE 1003.

6. Hose connection vacuum breakers shall conform to ASSE 1011 or CAN/CSA B64.2.

7. Backflow preventers with intermediate atmospheric vent shall conform to ASSE 1012 and dual check type atmospheric port backflow preventers shall conform to CAN/CSA B64.3.

8. Reduced pressure principle backflow preventers shall conform with ASSE 1013 or CAN/CSA B64.4

9. Double check backflow prevention assemblies shall conform to ASSE 1015 or CAN/CSA B64.5.

10. Individual thermostatic, pressure balancing, and combination pressure balancing and thermostatic control valves serving individual showers shall conform to ASSE 1016 or CAN/CSA B125.

~~10.~~ 11. Trap seal primer valves, water fed shall conform to ASSE 1018.

~~11.~~12. Vacuum breaker wall hydrants, freeze resistant automatic draining type shall conform to ASSE 1019, types A or B.

~~12.~~ 13. Pressure vacuum breaker assemblies shall conform to ASSE 1020 or CAN/CSA B64.1.2.

~~13.~~14. Laboratory faucet backflow preventers shall conform to ASSE 1035, ASSE 1022 or CAN/CSA B64.7.

~~14.~~15. Reduced pressure detector backflow preventers shall conform to ASSE 1047.

~~15.~~16. Double check detector assembly backflow preventers shall conform to ASSE 1048.

~~16.~~17. Back siphonage backflow vacuum breakers shall conform to ASSE 1056.

~~17.~~18. Hose connection backflow preventers shall conform to ASSE 1052.

SECTION 57. Comm 84.30 (5) (c) 19. is created to read:

19. Backflow preventers for carbonated beverage machines shall conform to ASSE 1022.

SECTION 58. Comm 84.30 (6) (f) is amended to read:

Comm 84.30 (6) (f) *Safing materials*. Safing materials shall be ~~made of materials which are~~ waterproof when subjected to 2 feet of hydrostatic head when tested in accordance with ASTM C1306 or ASTM D4068. The material shall be recognized by the manufacturer for use as a safing material.

SECTION 59. Tables 84.30-3 (partial), 84.30-5 (partial), 84.30-6 (partial), 84.30-8 (partial), 84.30-9 (partial) 84.30-10 (partial) and 84.30-11 (partial) are amended to read:

Table 84.30-3
SANITARY BUILDING SEWER PIPE AND TUBING

Material	Standard
PVC Corrugated Sewer Pipe With a Smooth Interior and Fittings	ASTM F949
PVC Large-Diameter Plastic Gravity Sewer Pipe and Fittings	ASTM F679
PVC Profile Gravity Sewer Pipe and Fittings Based on Controlled Inside Diameter	ASTM F794
Type PS-46 and Type PS-115 PVC Plastic Gravity Flow Sewer Pipe and Fittings	ASTM F789

~~Note a:~~ [a]Thermoplastic sewer pipe shall be installed in accordance with ASTM D2321.
~~Note b:~~ [b]Copper tubing, type M, may not be installed underground.

Table 84.30-5
PRESSURIZED DRAIN PIPE AND TUBING
AND SERVICE SUCTION LINES

Material	Standard
Chlorinated ~~polyvinyl chloride~~ Poly (Vinyl Chloride) (CPVC)[a]	ASTMD2846; ASTM F441/F441M; ASTM F442/F442M
Polyethylene Pressure Pipe and Fitting, 4 in. through 63 in., for Water Distribution	AWWA C906

~~Note a:~~ [a]Thermoplastic sewer pipe shall be installed in accordance with ASTM D2321.
~~Note b:~~ [b]Copper tubing, type M, may not be installed underground.

Table 84.30-6
STORM BUILDING SEWER PIPE AND TUBING

Material	Standard
Concrete, circular	ASTM C14; ASTM C76
Concrete, elliptical	ASTM C507/C507M
PVC Corrugated Sewer Pipe With a Smooth Interior and Fittings	ASTM F949
PVC Large-Diameter Plastic Gravity Sewer Pipe and Fittings	ASTM F679
PVC Profile Gravity Sewer Pipe and Fittings Based on Controlled Inside Diameter	ASTM F794
Type PS-46 and Type PS-115 PVC Plastic Gravity Flow Sewer Pipe and Fittings	ASTM F789

~~Note a:~~ [a]Thermoplastic sewer pipe shall be installed in accordance with ASTM D2321.
~~Note b:~~ [b]Copper tubing, type M, may not be installed underground.

Table 84.30-8
PIPE AND TUBING FOR
WATER SERVICES AND PRIVATE WATER MAINS

Material	Standard
Chlorinated ~~polyvinyl chloride~~ Poly (Vinyl Chloride) (CPVC)[a]	ASTM D2846; ASTM F441/F441M; ASTM F442/F442M
Crosslinked Polyethylene /Aluminum / Crosslinked Polyethylene ¼ – 1	CAN/CSA B137.10
Polyethylene (PE)[a]	ASTM D2239; ASTM D2737; ASTM D2104; ASTM D2447; ASTM D3035, AWWA C906
Polyethylene / Aluminum / Polyethylene ¼ – 1	CAN/CSA B137.9
Polyethylene / Aluminum / Polyethylene (PE-AL-PE) Composite Pressure Pipe	ASTM F1282
Stainless steel	~~ANSI~~ ASME B36.19/B36.19M

~~Note a:~~ [a] Plastic water service systems shall be installed in accordance with ASTM D2774.
~~Note b:~~ [b] Copper tubing, type M, may not be installed underground.

Table 84.30-9
WATER DISTRIBUTION PIPE AND TUBING

Material	Standard
Chlorinated ~~polyvinyl chloride~~ Poly (Vinyl Chloride) (CPVC)[a]	ASTM D2846; ~~ASTM F441~~[c] ASTM F441/F441M[c]
Crosslinked Polyethylene /Aluminum / Crosslinked Polyethylene ¼ – 1	CAN/CSA B137.10
Polyethylene / Aluminum / Polyethylene ¼ – 1	CAN/CSA B137.9
Polyethylene / Aluminum / Polyethylene (PE-AL-PE) Composite Pressure Pipe	ASTM F1282
Stainless ~~steel~~ Steel	~~ANSI~~ ASME B36.19M; ASTM A270; ASTM A450

~~Note a:~~ [a] Plastic pipe and tubing installed underground shall be in accordance with ASTM D2774.
~~Note b:~~ [b] Copper tubing, type M, may not be installed underground.
~~Note c:~~ [c] Use is limited to pipe $2^1/_2$ inches or less in diameter.

Table 84.30-10
EXTERIOR TURF
SPRINKLER SYSTEM PIPE AND TUBING

Material	Standard
Chlorinated ~~polyvinyl chloride~~ Poly (Vinyl Chloride) (CPVC)[a]	ASTM D2846; ~~ASTM F441;~~ ASTM F441/F441M;
Crosslinked Polyethylene / Aluminum / Crosslinked (PEX-AL-PEX) Polyethylene Pressure Pipe	ASTM F1281
Crosslinked Polyethylene /Aluminum / Crosslinked Polyethylene ¼ – 1	CAN/CSA B137.10
Polyethylene / Aluminum / Polyethylene ¼ – 1	CAN/CSA B137.9
Polyethylene / Aluminum / Polyethylene (PE-AL-PE) Composite Pressure Pipe	ASTM F1282

~~Note a:~~ [a] Plastic pipe and tubing installed underground shall be in accordance with ASTM D2774.
~~Note b:~~ [b] Copper tubing, type M, may not be installed underground.

Table 84.30-11
PIPE FITTINGS

Material	Standard
Cast copper alloy	~~ANSI~~ ASME B16.18; ~~ANSI~~ ASME B16.23; ~~ANSI~~ ASME B16.26; ~~ANSI B16.32~~
Cast iron	~~ANSI~~ ASME B16.4; ~~ANSI~~ ASME B16.12; ~~ANSI~~ ASME B16.1; ASME B16.45
Copper	~~ANSI~~ ASME B16.22; ~~ANSI~~ ASME B16.29; ~~ANSI B16.43~~
Crosslinked Polyethylene (PEX)	ASTM F1807
Polyvinyl ~~chloride~~ Chloride (PVC)	ASTM D2464; ASTM D2466; ASTM D2467; ASTM D3311; ASTM F409; ASTM F1336
Polyvinyl Chloride (PVC) Gasketed Sewer Fittings	ASTM F1336

~~Note a:~~ [a]Steel fittings and malleable iron fittings to be used in a water supply system shall be galvanized-coated in accordance with ASTM A123/123M.

~~Note b:~~ [b]See s. Comm 84.30 (4) (intro.) concerning the maximum lead content for fittings.

~~Note c:~~ [c]Copper and copper alloy fittings conforming to MSS ~~SP-10~~ SP-103, may not be installed underground.

SECTION 60. Comm 84.30 (6) (e) is amended to read:

Comm 84.30 (6) (e) *Flush pipes and fittings.* Flush pipes and fittings shall be of nonferrous material and shall conform to ~~ANSI~~ ASME A112.19.5.

SECTION 61. Comm 84.40 (2) (c) is amended to read:

Comm 84.40 (2) (c) *Threaded joints.* Threaded joints shall only be used on pipes of schedule 80 or heavier. Threaded joints shall conform to ~~ANSI~~ ASME B1.20.1. The pipe shall be threaded with dies specifically designed for plastic pipe. Thread lubricant or tape approved for such use shall be applied to the male threads only.

SECTION 62. Comm 84.40 (3) (a) is amended to read:

Comm 84.40 (3) (a) *Threaded joints.* Threaded joints shall conform to ~~ANSI~~ ASME B1.20.1. Pipe joint compound or tape shall be used on the male threads only.

SECTION 63. Comm 84.40 (4) (a) and (c) are amended to read:

Comm 84.40 (4) (a) *Brazed joints.* All joint surfaces to be brazed shall be cleaned bright by other than chemical means. Brazing filler metal conforming to AWS A5.8 or other approved material shall be used. The joining of water supply piping shall be made with lead-free materials. ~~"Lead-free" shall mean a chemical composition equal to or less than 0.2% of lead.~~

(c) *Soldered joints.* All joint surfaces to be soldered shall be cleaned bright by other than chemical means. A nontoxic flux shall be applied to all joint surfaces. Solder conforming to ASTM B32 or other approved material shall be used. The joining of water supply piping shall be made with lead-free materials. ~~"Lead-free" shall mean a chemical composition equal to or less than 0.2% of lead.~~

SECTION 64. Comm 84.40 (4) (d) is amended to read:

Comm 84.40 (4) (d) *Threaded joints.* Threaded joints shall conform to ~~ANSI~~ ASME B1.20.1. Pipe joint compound or tape shall be used on the male threads only.

SECTION 65. Comm 84.40 (7) is renumbered Comm 84.40 (7) (a) and (b) and amended to read:

Comm 84.40 (7) CONCRETE PIPE. (a) *Circular pipe.* Joints between circular concrete pipe or fittings shall be made by use of an elastomeric seal conforming to ASTM C443 or C990.

(b) *Elliptical pipe.* Joints between elliptical concrete pipe or fittings shall be made by use of materials conforming to ASTM C887 Type II or ASTM C990.

SECTION 66. Comm 84.40 (8) (a) and (d) are amended to read:

Comm 84.40 (8) (a) *Brazed joints.* All joint surfaces to be brazed shall be cleaned bright by other than chemical means. Brazing filler metal conforming to AWS A5.8 or other approved material shall be used. The joining of water supply piping shall be made with lead-free materials. ~~"Lead-free" shall mean a chemical composition equal to or less than 0.2% of lead.~~

(d) *Soldered joints.* All joint surfaces to be soldered shall be cleaned bright by other than chemical means. A nontoxic flux shall be applied to all joint surfaces. Solder conforming to ASTM B32 or other approved material shall be used. The joining of water supply piping shall be made with lead-free materials. ~~"Lead-free" shall mean a chemical composition equal to or less than 0.2% of lead.~~

SECTION 67. Comm 84.40 (9) (b) is amended to read:

Comm 84.40 (9) (b) *Threaded joints.* Threaded joints shall conform to ~~ANSI~~ ASME B1.20.1. Pipe joint compound or tape shall be used on the male threads only.

SECTION 68. Comm 84.40 (10) (a) is amended to read:

Comm 84.40 (10) (a) *Threaded joints.* Threaded joints shall conform to ~~ANSI~~ ASME B1.20.1. Pipe joint compound or tape shall be used on the male threads only.

SECTION 69. Comm 84.40 (14) (c) is amended to read:

Comm 84.40 (14) (c) *Threaded joints.* Threaded joints shall only be used on pipes of schedule 80 or heavier. Threaded joints shall conform to ~~ANSI~~ ASME B1.20.1. The pipe shall be threaded with dies specifically designed for plastic pipe. Thread lubricant or tape approved for such use shall be applied to the male threads only.

SECTION 70. Comm 84.60 is repealed and recreated to read:

Comm 84.60 Incorporation of standards by reference. **(1)** CONSENT. Pursuant to s. 227.025, Stats., the attorney general and the revisor of statutes have consented to the incorporation by reference of the standards listed in sub. (3).

(2) COPIES. Copies of the adopted standards are on file in the offices of the department, the secretary of state and the revisor of statutes. Copies may be purchased through the respective organizations listed in Tables 84.60-1 to 84.60-12.

(3) ADOPTION OF STANDARDS. The standards referenced in Tables 84.60-1 to 84.60-12 are hereby incorporated by reference into this chapter.

SECTION 71. Table 84.60-2 is repealed and recreated to read:

Table 84.60-2

	ANSI	American National Standards Institute, Inc. 1430 Broadway New York, New York 10018
	Standard Reference Number	Title
1.	Z21.22a-90	Relief Valves and Automatic Gas Shutoff Devices for Hot Water Supply Systems
2.	Z124.1-95	Plastic Bathtub Units
3.	Z124.2-95	Plastic Shower Receptors and Shower Stalls
4.	Z124.3-95	Plastic Lavatories
5.	Z124.4-96	Plastic Water Closet Bowls and Tanks
6.	Z124.6-97	Plastic Sinks
7.	Z124.9-94	Fixtures, Plastic Urinal, American National Standard for

SECTION 72. Table 84.60-3e is created to read:

Table 84.60-3e

	ASME	American Society of Mechanical Engineers 345 East 47th Street New York, New York 10017
	Standard Reference Number	Title
1.	A112.1.2-91 (R1998)	Air Gaps in Plumbing Systems
2.	A112.6.1M-97	Floor-Affixed Supports for Off-the-Floor Plumbing Fixtures for Public Use
3.	A112.14.1-75 (R1998)	Backwater Valves
4.	A112.18.1M-96	Plumbing Fixture Fittings
5.	A112.19.1M-94	Enameled Cast Iron Plumbing Fixtures
6.	A112.19.2M-95	Vitreous China Plumbing Fixtures
7.	A112.19.3M-87 (R1996)	Stainless Steel Plumbing Fixtures (Designed for Residential Use)
8.	A112.19.4-94	Porcelain Enameled Formed Steel Plumbing Fixtures
9.	A112.19.5-79 (R1998)	Trim for Water-Closet Bowls, Tanks, and Urinals (Dimensional Standards)
10.	A112.19.6-95	Hydraulic Performance Requirements for Water Closets and Urinals
11.	A112.21.1M-91	Floor Drains
12.	A112.21.2M-83	Roof Drains
13.	B1.20.1-83 (R1992)	Pipe Threads, General Purpose (Inch)
14.	B16.1-89	Cast Iron Pipe Flanges and Flanged Fittings
15.	B16.3-92	Malleable Iron Threaded Fittings
16.	B16.4-92	Gray Iron Threaded Fittings
17.	B16.5a-98	Pipe Flanges and Flanged Fittings NPS 1/2 Through NPS 24 (and addenda)
18.	B16.9-93	Factory-Made Wrought Steel Buttwelding Fittings
19.	B16.11-96	Forged Fittings, Socket-Welding and Threaded
20.	B16.12-91	Cast Iron Threaded Drainage Fittings
21.	B16.15-85 (R1994)	Cast Bronze Threaded Fittings, Classes 125 and 250
22.	B16.18-84 (R1994)	Cast Copper Alloy Solder Joint Pressure Fittings
23.	B16.22-95	Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings
24.	B16.23-92	Cast Copper Alloy Solder Joint Drainage Fittings-DWV
25.	B16.24-91	Cast Copper Alloy Pipe Flanges and Flanged Fittings, Class 150, 300, 400, 600, 900, 1500 and 2500
26.	B16.26-88	Cast Copper Alloy Fittings for Flared Copper Tubes
27.	B16.28-94	Wrought Steel Buttwelding Short Radius Elbows and Returns
28.	B16.29-94	Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings - DWV
29.	B16.42-87 (R1997)	Ductile Iron Pipe Flanges and Flanged Fittings
30.	B16.45-87 (R1997)	Cast Iron Fittings for Sovent® Drainage Systems
31.	B36.19M-85 (R1994)	Stainless Steel Pipe

SECTION 73. Table 84.60-4 (partial) is amended to read:

Table 84.60-4

	ASSE	American Society of Sanitary Engineering ~~P.O. Box 9712~~ 28901 Clemens Road, Suite 100 ~~Bay Village, Ohio 44140~~ West Lake, Ohio 44105
	Standard Reference Number	Title
3.	~~1003-93~~ 1003-95	Water Pressure Reducing Valves
10.	~~1010-82~~ 1010-96	Water Hammer ~~Arrestors~~ Arresters
11.	~~1011-93~~ 1011-95	Hose Connection Vacuum Breakers
15e.	1016-96	Individual Thermostatic, Pressure Balancing, and Combination Pressure Balancing and Thermostatic Control Valves for Individual Fixture Fittings
16.	~~1018-86~~ 1018-88	Trap Seal Primer Valves, Water Supply Fed
17.	~~1019-93~~ 1019-97	Vacuum Breaker Wall Hydrants, Freeze Resistant Automatic Draining Type
18.	~~1020-90~~ 1020-89	Pressure Vacuum Breaker Assembly
18e.	1022-96	Backflow Preventer for Carbonated Beverage Machines
21.	~~1035-93~~ 1035-95	Laboratory Faucet Backflow Preventers
22e.	1043-92	Cast Iron Sovent® Sanitary Drain Systems
23.	~~1047-93~~ 1047-95	Reduced Pressure Detector Backflow Preventer
24.	~~1048-93~~ 1048-95	Double Check Detector Assembly Backflow Preventer
25.	~~1052-93~~ 1052-94	Hose Connection Backflow Preventers
25e.	1055-97	Chemical Dispensing Systems
26.	~~1056-93~~ 1056-95	Back Siphonage ~~Backflow~~ Vacuum Breakers
26e.	1066-97	Individual Pressure Balancing In-Line Valves for Individual Fixture Fittings
~~27.~~	~~5010-1013-1-90~~	~~Field Test Procedure for a Reduced Pressure Principle Assembly Using A Differential Pressure Gauge~~
~~28.~~	~~5010-1015-1-90~~	~~Field Test Procedure for a Double Check Valve Assembly Using a Duplex Gauge~~
~~29.~~	~~5010-1015-2-90~~	~~Field Test Procedure for a Double Check Valve Assembly Using a Differential Pressure Gauge High and Low Pressure Hose Method~~
~~30.~~	~~5010-1015-3-90~~	~~Field Test Procedure for a Double Check Valve Assembly Using a Differential Pressure Gauge High Hose Method~~
~~31.~~	~~5010-1015-4-90~~	~~Field Test Procedure for a Double Check Valve Assembly Using a Sight Tube~~
~~32.~~	~~5010-1020-1-90~~	~~Field Test Procedure for a Pressure Vacuum Breaker Assembly~~
~~33.~~	~~5010-1047-1-90~~	~~Field Test Procedure for a Reduced Pressure Detector Assembly Using a Differential Pressure Gauge~~
~~34.~~	~~5010-1048-1-90~~	~~Field Test Procedure for a Double Check Detector Assembly Using a Duplex Gauge~~
~~36.~~	~~5010-1048-3-90~~	~~Field Test Procedure for a Double Check Detector Assembly Using a Differential Pressure Gauge High Pressure Hose Method~~
~~37.~~	~~5010-1048-4-90~~	~~Field Test Procedure for a Double Check Detector Assembly Using a Sight Tube~~

SECTION 74. Tables 84.60-5 (partial), 84.60-6 (partial), 84.60-7 (partial) are amended to read:

Table 84.60-5

	ASTM	American Society for Testing and Materials 100 Barr Harbor Drive West Conshohocken, Pennsylvania 19428-2959
	Standard Reference Number	Title
1.	~~A53-93~~ A53-97	Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless, Specification for
2.	~~A74-94~~ A74-96	Cast Iron Soil Pipe and Fittings, Specification for
3.	~~A123-89a~~ A123/A123M-97a	Zinc (Hot-Galvanized) Coatings on Iron and Steel Products ~~Fabricated from Rolled, Pressed, and Forged Steel Shapes, Plates and Strip~~, Specification for
4.	~~A270-90~~ A270-95a	Seamless and Welded Austenitic Stainless Steel Sanitary Tubing, Specification for
5.	~~A377-94~~ A377-95	Ductile-Iron Pressure Pipe, Standard Index of Specification for
6.	~~A403/A403m-94a~~ A403/A403M-97a	Wrought Austenitic Stainless Steel Piping Fittings, Specification for
7.	~~A450/A450M-94~~ A450/A450M-96	~~General Requirements for~~ Carbon, Ferritic Alloy, and Austenitic Alloy Steel Tubes~~, Specification for~~
7e.	A888-96	Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Pipe Applications, Specifications for
8.	~~B32-95~~ B32-96	~~Solder Metal, Specification for~~ Solder Metal
9.	B42-93	Pipe, Seamless Copper ~~Pipe~~, Standard Sizes~~, Specification for~~
10.	~~B43-94~~ B43-96	Seamless Red Brass Pipe, Standard Sizes, Specification for
~~11.~~	~~B75-93~~	~~Seamless Copper Tube, Specification for~~
~~12.~~11.	~~B88-93~~ B88/B88M-96	~~Seamless Copper Water Tube, Specification for~~ Water, Seamless, Copper Tube
~~13.~~12.	~~B152-94~~ B152/B152M-97a	Copper Sheet, Strip, Plate, and Rolled Bar, Specification for
~~14.~~13.	~~B251-93~~ B251/B251M-97	~~General Requirements for~~ Tube, Wrought Seamless Copper and Copper~~-Alloy Tube, Specification for~~
~~15.~~14.	~~B302-92~~ B302-97	Threadless Copper Pipe, Specification for
~~16.~~15.	~~B306-92~~ B306-96	Standard Specifications for Copper Drainage Tube (DWV~~), Specification for~~
~~17.~~16.	~~C4-62(R1991)~~ C4-97	Clay Drain Tile and Perforated Clay Drain Tile, Specification for
~~18.~~17.	~~C14-94~~ C14/C14M-95	Concrete Sewer, Storm Drain, and Culvert Pipe, Specification for
~~19.~~18.	~~C33-93~~ C33-97	Concrete Aggregates~~, Specification for~~
~~20.~~19.	~~C76-94~~ C76-98	~~Reinforced Concrete~~ Culvert, Storm Drain, and Sewer Pipe, ~~Specification for~~ Reinforced Concrete
20.	C76M-97	Reinforced Concrete Culvert, Storm Drain, and Culvert Pipe (metric), Specifications for
21.	~~C425-91~~ C425-97	~~Compression Joints for Vitrified~~ Clay Pipe and Fittings~~, Specification~~ for Vitrified Compression Joints
22.	~~C443-94~~ C443/C443M-94	Specification for Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets~~, Specification for~~
22e.	C507/C507M-95a	Reinforced Concrete Elliptical Culvert, Storm Drain and Sewer, Specifications for
23.	~~C564-95~~ C564-97	Rubber Gaskets for Cast Iron Soil Pipe and Fittings, Specification for
24.	~~C700-91~~ C700-97	Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated~~,~~ Specification for
24e.	C877/C877M-94	External Sealing Bands for Noncircular Concrete Sewer, Storm Drain, and Culvert Pipe, Specifications for
24m.	C990/C990M-96	Joints for Concrete Pipe, Manholes, Precast Box Sections Using Preformed Flexible Joint Sealants, Specifications for,
24s.	C1306-95	Hydrostatic Pressure Resistance of a Liquid-Applied Waterproofing Membrane, Standard Test Method for
25.	~~D1527-94~~ D1527-96a	Acrylonitrile-Butadiene-Styrene (ABS) ~~Plastic Pipe,~~ Schedules 40 and 80~~, Specification for~~
26.	~~D1785-93~~ D1785-96b	Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80 and 120~~,~~ Specification for
27.	~~D2104-93~~ D2104-96	Standard Specifications for Polyethylene (PE) Plastic Pipe, Schedule 40~~, Specification for~~
28.	~~D2235-93a~~ D2235-96a	Standard Specifications for Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings~~, Specification for~~

Table 84.60-5
(continued)

	ASTM	American Society for Testing and Materials 100 Barr Harbor Drive West Conshohocken, Pennsylvania 19428-2959
	Standard Reference Number	Title
29.	~~D2239-93~~ D2239-96a	Polyethylene (PE) Plastic Pipe (SIDR-PR) Based on Controlled Inside Diameter~~,~~ Specification for
30.	~~D2241-93~~ D2241-96b	Standard Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe (SDR-~~PR~~ Series), ~~Specification for~~
31.	~~D2282-94~~ D2282-96a	Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe (SDR-PR), Specification for
32.	D2321-89	Underground Installation of Thermoplastic Pipe, for Sewers and Other Gravity-Flow Applications, Practice for
33.	~~D2447-93~~ D2447-95	Polyethylene (PE) Plastic Pipe, Schedules 40 and 80, Based on Outside Diameter, Specification for
34.	~~D2464-94~~ D2464-96a	Threaded Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, Specification for
35.	~~D2466-94a~~ D2466-97	Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, Specification for
36.	~~D2467-94~~ D2467-96a	Socket-Type Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, Specification for
37.	~~D2468-93~~ D2468-96a	Acrylonitrile-Butadiene-Styrene (ABS), Plastic Pipe Fittings, Schedule 40, Specification for
38.	~~D2564-93~~ D2564-96a	Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic ~~Pipe and Fittings Piping~~ Systems, Specification for
39.	~~D2609-93~~ D2609-97	Plastic Insert Fittings for Polyethylene (PE) Plastic Pipe, Specification for
40.	~~D2657-90~~ D2657-97	~~Heat Joining~~ Heat Fusion Joining of Polyolefin Pipe and Fittings, ~~Specification for~~ Standard Practice of
41.	~~D2661-94a~~ D2661-97a	Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings, Specification for
42.	~~D2662-93~~ D2662-96a	Polybutylene (PB) Plastic Pipe (SIDR-PR), Based on Controlled Inside Diameter, Specification for
43.	~~D2665-94~~ D2665-97a	Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings, Specification for
44.	~~D2666-93~~ D2666-96a	Polybutylene (PB) Plastic Tubing, Specification for
45.	~~D2672-94~~ D2672-96a	Joints for IPS PVC Pipe Using Solvent Cement, Specification for
46.	~~D2672-93~~ D2680-95a	Acrylonitrile-Butadiene-Styrene (ABS) and Poly (Vinyl Chloride) (PVC) Composite Sewer Piping, Specification for
47.	~~D2683-93~~ D2683-98	Socket-Type Polyethylene Fittings for Outside Diameter-Controlled Polyethylene Pipe and Tubing, Specification for
48.	~~D2729-93~~ D2729-96a	Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings, Specification for
49.	~~D2737-93~~ D2737-96a	Polyethylene (PE) Plastic Tubing, Specification for
50.	~~D2751-93~~ D2751-96a	Acrylonitrile-Butadiene-Styrene (ABS) Sewer Pipe and Fittings, Specification for
51.	D2774-94	Underground Installation of Thermoplastic Pressure Piping, Standard Practice for
52.	~~D2846-93~~ D2846/D2846M-97	Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot- and Cold-Water Distribution Systems, Specification for
53.	~~D2852-93~~ D2852-95	Styrene-Rubber (SR) Plastic Drain Pipe and Fittings, Specification for
54.	~~D2855-93~~ D2855-96	Making Solvent-Cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings, Practice for
55.	~~D3000-93~~ D3000-95a	Polybutylene (PB) Plastic Pipe (SDR-PR) Based on Outside Diameter, Specification for
56.	~~D3034-93~~ D3034-97	Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings, Specification for
57.	~~D3035-93~~ D3035-95	Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Controlled Outside Diameter, Specification for
58.	~~D3139-89~~ D3139-96a	Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals, Specification for
59.	D3140-90	Flaring Polyolefin Pipe and Tubing, Practice for
60.	~~D3212-92~~ D3212-96a	Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals, Specification for

Table 84.60-5
(continued)

	ASTM	American Society for Testing and Materials 100 Barr Harbor Drive West Conshohocken, Pennsylvania 19428-2959
	Standard Reference Number	Title
61.	~~D3261-93~~ D3261-97	Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing, Specification for
62.	~~D3309-93~~ D3309-96a	Polybutylene (PB) Plastic Hot- and Cold-Water Distribution Systems, Specification for
63.	~~D3311-92~~ D3311-94	Drain, Waste, and Vent (DWV) Plastic Fittings Patterns, Specification for
63e.	D4068-96	Chlorinated Polyethylene (CPE) Sheeting for Concealed Water-Containment Membrane, Standard Test Method for
64.	F402-93	Safe Handling of Solvent Cements, Primers and Cleaners Used for Joining Thermoplastic Pipe and Fittings, Practice for
65.	~~F405-93~~ F405-97	Corrugated Polyethylene (PE) Tubing and Fittings, Specification for
66.	~~F409-93~~ F409-97	Thermoplastic Accessible and Replaceable Plastic Tube and Tubular Fittings, Specification for
67.	~~F437-93~~ F437-96a	Threaded Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80, Specification for
68.	~~F438-93~~ F438-97	Socket-Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40, Specification for
69.	~~F439-93a~~ F439-97	Socket-Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80, Specification for
70.	~~F441-94~~ F441/ F441M-97	Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80, Specification for
71.	~~F442-94~~ F442/ F442M-97	Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe (SDR-PR), Specification for
72.	~~F477-93~~ F477-96a	Elastomeric Seals (Gaskets) for Joining Plastic Pipe, Specification for
72e.	F492-95	Propylene and Polypropylene (PP) Plastic-Lined Ferrous Metal Pipe Fittings
73.	~~F493-93a~~ F493-97	Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe and Fittings, Specification for
74.	~~F628-93~~ F628-97a	Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe with a Cellular Core, Specification for
75.	~~F656-93~~ F656-96a	Primers for Use in Solvent Cement Joints of Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings, Specification for
75e.	F679-95	Poly (Vinyl Chloride) (PVC) Large-Diameter Plastic Gravity Sewer Pipe and Fittings
75m.	F789-95a	Type PS-46 and Type PS-115 PVC Plastic Gravity Flow Sewer Pipe and Fittings
75s.	F794-97	Poly (Vinyl Chloride) (PVC) Profile Gravity Sewer Pipe and Fittings Based on Controlled Inside Diameter
76.	F810-93	Smoothwall Polyethylene (PE) Pipe for Use in Drainage and Waste Disposal Absorption Fields, Specification for
77.	~~F845-93~~ F845-96	Plastic Insert Fittings for Polybutylene (PB) Tubing, Specification for
78.	~~F876-93~~ F876-97	Crosslinked Polyethylene (PEX) Tubing, Specification for
79.	~~F877-93~~ F877-97a	Crosslinked Polyethylene (PEX) Plastic Hot-and Cold- Water Distribution Systems, Specification for
80.	~~F891-93a~~ F891-97	Coextruded Poly (Vinyl Chloride) (PVC) Plastic Pipe ~~with~~ With a Cellular Core, Specification for
81.	F949-96a	Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe With a Smooth Interior and Fittings
82.	F1281-98	Crosslinked Polyethylene / Aluminum / Crosslinked Polyethylene (PEX-AL-PEX) Pressure Pipe
83.	F1282-97	Polyethylene / Aluminum / Polyethylene (PE-AL-PE) Composite Pressure Pipe
84.	F1336-93	Poly (Vinyl Chloride) (PVC) Gasketed Sewer Fittings
85.	F1807-98A	Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing

Table 84.60-6

	AWS	American Welding Society 550 N.W. LeJune Road Miami, Florida 33126
	Standard Reference Number	Title
	AWS A5.8-92	Filler Metals for Brazing ~~and Braze~~ Welding, Specification for

Table 84.60-7

	AWWA	American Water Works Association Data Processing Department 6666 West Quincy Avenue Denver, Colorado 80235
	Standard Reference Number	Title
2.	~~C111/A21.11-90.~~ C111/A21.11-95	American National Standard for Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings
3.	~~C115/A21.15-88.~~ C115/A21.15-94	American National Standard for Flanged Ductile-Iron Pipe with Ductile Type Iron or ~~and~~ Gray-Iron Pipe ~~with~~ Threaded Flanges
4.	~~C151/A21.51-91~~ C151/A21.51-96	American National Standard for Ductile-Iron Pipe, Centrifugally Cast for Water ~~or Other Liquids~~
5e.	C651-92	Water Mains, Disinfecting
6.	~~C700-90~~ C700-95	Cold Water Meters - Displacement Type with Bronze Main Case (w/1991 Addendum)
10.	~~C706-91~~ C706-96	Cold Water Meters, Direct-Reading, Remote -Registration Systems for
12.	~~C708-91~~ C708-96	Cold Water Meters-Multi-Jet Type
13.	~~C710-90~~ C710-95	Cold Water Meters, Displacement Type-Plastic Main Case (w/1991 ~~Adendum~~ Addendum)
14.	C906-90	Polyethylene Pressure Pipe and Fittings, 4 in. through 63 in., for Water Distribution

SECTION 75. Table 84.60-7e is created to read:

Table 84.60-7e

	CAN/CSA	Canadian Standards Association 178 Rexdale Boulevard Rexdale (Toronto), Ontario, Canada M9W 1R3
	Standard Reference Number	Title
1.	B64-94	Backflow Preventers and Vacuum Breakers
2.	B125-93	Plumbing Fittings
3.	B137.9-98	Polyethylene / Aluminum / Polyethylene Composite Pressure Pipe Systems
4.	B137.10-98	Crosslinked Polyethylene /Aluminum / Crosslinked Polyethylene Composite Pressure Pipe Systems
5.	B181.1-96	ABS Drain, Waste, and Vent Pipe and Pipe Fittings
6.	B181.2-96	PVC Drain, Waste, and Vent Pipe and Pipe Fittings

SECTION 76. Table 84.60-8 is amended to read:

Table 84.60-8

	CISPI	Cast Iron Soil Pipe Institute 5959 Shallowford Road, Suite 419 Chattanooga, Tennessee 37421
	Standard Reference Number	Title
1.	F1281-97	Crosslinked Polyethylene / Aluminum / Crosslinked (PEX-AL-PEX) Polyethylene Pressure Pipe
~~1.~~ 2.	~~301-95~~ 301-97	Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications, Standard Specification for
~~2.~~ 3.	~~310-95~~ 310-97	Coupling for Use in Connection with Hubless Cast Iron Soil ~~Pipeand~~ Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications, Specification for

SECTION 77. Table 84.60-11 is repealed and recreated to read:

Table 84.60-11

	NSF	NSF International 3475 Plymouth Road P.O. Box 130140 Ann Arbor, Michigan 48113-0140
	Standard Reference Number	Title
1.	NSF- 14-90	Plastic Piping Compounds and Related Materials
2.	NSF- 44-98	Residential Cation Exchange Water Softeners
3.	NSF- 61-97b	Drinking Water System Components Health Effects

SECTION 78. A-84.20 Appendix is repealed and recreated to read:

A-84.20 (5) SPACING OF PLUMBING FIXTURES.

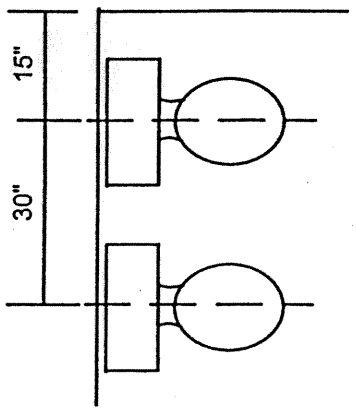

Figure 84.20-1. Spacing between water closets.

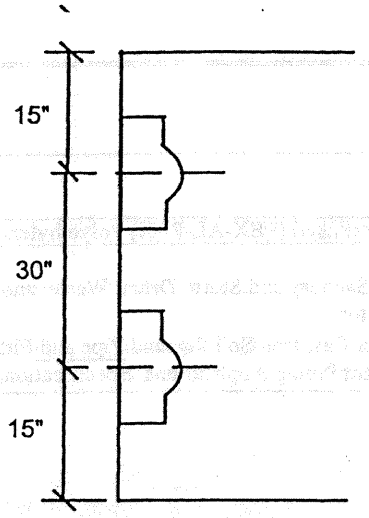

Figure 84.20-2. Spacing between stall type urinals.

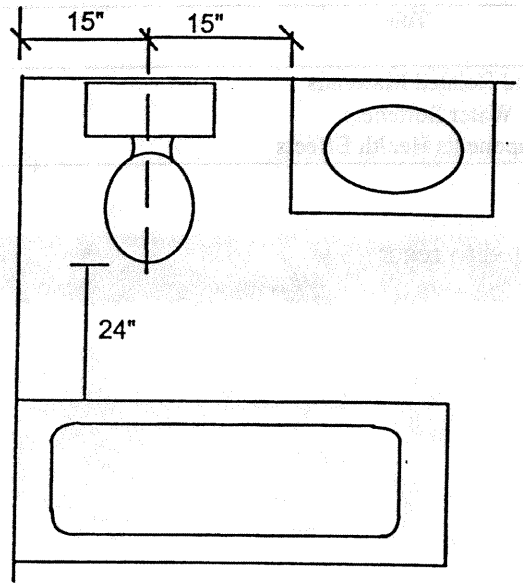

Figure 84.20-3. Spacing between water closet and tub.

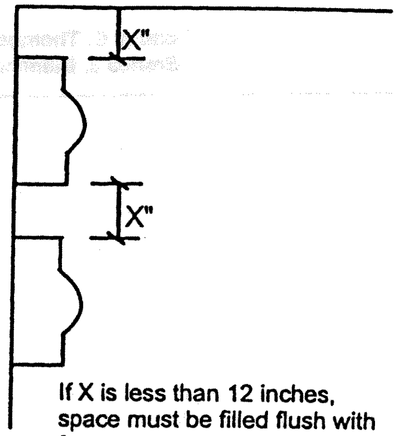

Figure 84.20-4. Spacing between wall hung or stall type urinals.

(end)

* *

EFFECTIVE DATE

Pursuant to s. 227.22 (2) (intro.), Stats., these rules shall take effect on the first day of the third month following publication in the Wisconsin Administrative Register. except...

* *

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JUL 10 2000

Wisconsin
Department of Commerce

Tommy G. Thompson, Governor
Brenda J. Blanchard, Secretary

7/7/00

Gary Poulson
Assistant Revisor of Statutes
Suite 800
131 West Wilson Street
Madison, Wisconsin 53703-3233

Dear Mr. Poulson:

NOTIFICATION OF RULE REFERRAL

This letter is to notify you that pursuant to section 227.19, Stats., the Department of Commerce has referred:

CLEARINGHOUSE RULE NO.: 99-123

RULE NO.: Chapters Comm 81, 82 & 84

RELATING TO: Wisconsin Uniform Plumbing Code

to the presiding officers of the Senate and Assembly of the Legislature for referral to the appropriate standing committees for Legislative review.

Respectfully submitted,

Brenda J. Blanchard
Secretary

FINAL REGULATORY FLEXIBILITY ANALYSIS

Department of Commerce

CLEARINGHOUSE RULE NO.: 99-123

RULE NO.: Chapters Comm 81, 82 & 84

RELATING TO: Wisconsin Unifrom Plumbing Code

☐ Final regulatory flexibility analysis not required. (Statement of determination required.)

1. Reason for including or failing to include the following methods for reducing impact of the rule on small businesses: Less stringent compliance or reporting requirements; less stringent schedules or deadlines for compliance or reporting requirements; simplification of compliance or reporting requirements; establishment of performance standards to replace design or operational standards; exemption from any or all requirements.

Although there may be minimal additional costs for cross connection control device testers, who would be now required to file test reports with the local purveyor of water in addition to the current requirement to file such reports with the department; these costs may be offset by cost savings for their ability to tag and track these products more clearly and receive updated information on each device as provided by the state.

2. Issues raised by small businesses during hearings, changes in proposed rules as a result of comments by small businesses and reasons for rejecting any alternatives suggested by small businesses.

One major issue raised by the industry was the use of a wall hydrant with integral cross connection control. The industry provided reasonable arguments such that the department will defer changes to this section pending the review by national standards development groups.

(Continued on reverse side)

3. Nature and estimated cost of preparation of any reports by small businesses.

Costs are expected to be minimal; see also response to item #2.

4. Nature and estimated cost of other measures and investments required of small businesses.

None required.

5. Additional cost to agency of administering or enforcing a rule which includes any of the methods in 1. for reducing impact on small businesses.

None anticipated.

6. Impact on public health, safety and welfare caused by including any of the methods in 1. for reducing impact on small businesses.

The additional paperwork to be routed/copied to the water purveyor may result in a positive impact on public health.

State of Wisconsin \ Department of Commerce

RULES in FINAL DRAFT FORM

Rule No.: Chapters Comm 81, 82 & 84

Relating to: Wisconsin Uniform Plumbing Code

Clearinghouse Rule No.: 99-123

The Wisconsin Department of Commerce proposes an order to:

renumber Comm 84.20 (5)(d) to (q) as Comm 84.20 (5)(e) to (r);

renumber and amend Comm 81.20(3) as 81.20(2); Comm 84.20(2) as 84.20(2)(a); Comm 84.20(5)(L) 3. to 5. as 84.20(5)(j) 2. to 4.; Comm 84.30(5)(c) 1. to 17. as 84.30(5)(c) 1. to 18.; and Comm 84.40(7) as 84.40(7)(a);

to amend Comm 81.01 (18), (20), (79), (80), (189), (203), and (204); Tables 81.20-4, 81.20-5, 81.20-6, 81.20-7, 81.20-8, and 81.20-11; Table 82.20-1; Comm 82.34(4)(b) 2.; Comm 82.36(3)(b) 3., Comm 82.36 (4)(a); Comm 82.36(5)(a); Comm 82.36(6)(a); Comm 82.40(8)(g); Comm 82.40(8)(i) 2.; Comm 82.41(3)(a) 2.; Comm 82.41(4)(k) 1.; Comm 82.41(5)(a); Comm 82.50(2); Comm 82.50(10)(g) Table 26 and Title; Comm 84.10(4) and (5); Comm 84.20(4)(b) 2.; Comm 84.20(5)(b) 1. a. and b.; Comm 84.20(5)(b) 2.; Comm 84.20(5)(c); Comm 84.20(5)(c) 2.; Comm 84.20(5)(f); Comm 84.20(5)(j) 1. a. to d.; Comm 84.20(5)(m) 1. and 2.; Comm 84.20(5)(n) 1. and 2.; Comm 84.20(5)(o); Comm 84.20(5)(r) 1.; Comm 84.20(6)(a) and (b); Comm 84.30(6)(f); Tables 84.30-3, 84.30-5, 84.30-6, 84.30-8, 84.30-9, 84.30-10, and 84.30-11; Comm 84.30(6)(e); Comm 84.40(2)(c); Comm 84.40(3)(a); Comm 84.40(4)(a), (c) and (d); Comm 84.40(8)(a) and (d); Comm 84.40(10)(a); and Comm 84.40(14)(c).

to repeal Comm 81.20(2); Table 81.20-14; Comm 82.50(10)(i) and Comm 84.20(5)(L)2.;

to repeal and recreate Comm 81.01 (116); Table 81.20-2; Comm 82.20(11); Comm 82.20(12); Comm 82.21(2)(a);Comm 82.21(3); Comm 82.33(9)(i); Tables 82.41-1 and 82.41-2; Comm 82.41(4)(b); Comm 82.41(4)(n); Comm 82.50(10)(g) and (h); Comm 84.20(4)(b) 9.; A-82.20(4) Appendix; and A-84.20(5) Appendix;

to create Comm 81.01 (7e), (17e), (60e), (67e), (67m), (82m), (90e), (163e), (170e), (199e), (209e), (209m), (252e), (288e) and Notes, and (288m); Comm 81.20 Table 81.20-10m, Comm 81.20(2) Notes; Tables 82.21-3e and 81.20-7e; Comm 82.20(4)(e); Table 82.21-1; Comm 82.31(16)(d) 2. Notes; Table 82.33-3; Comm 82.36(3)(b) 3. Note; Comm 82.36(3)(b) 5.; Table 82.36-4a; Comm 82.40(3)(d) 3.; Comm 82.41 (4) (k) 1. c., Comm 82.41(5)(L); Comm 82.60(2)(d); Comm 84.20(2)(b) and Note; Comm 84.20(5)(d); Comm 84.20(5)(m) 1. e.; Comm 84.20 (5) (n) 1. b., Comm 84.30(5)(c) 8. Note; Comm 84.30(5)(c) 9. Note; Comm 84.30(5)(c) 10., Comm 84.30(5)(c) 19.; Comm 84.40(7)(b); and Comm 84.40(9)(b), relating to the state uniform plumbing code.

* *

Analysis of Proposed Rules

Statutory authority: ss. 101.02 (1), 101.63 (1), 101.73 (1), 101.82 (1) and 145.02 (3), Stats.
Statutes interpreted: ss. 145.02 (4), 145.045, 145.13, 145.135, 145.19, 145.20, Stats.

Under s. 145.02, Stats., the Department of Commerce has the responsibility of safeguarding public health and the waters of the state relative to the construction, installation and maintenance of plumbing. One mechanism of the Department to fulfill this responsibility has been the promulgation of the state uniform plumbing code, chs. Comm 81-87.

This rule revision includes changes to various definitions important to health-related occupancies so as to conform to regulations of the Department of Health and Family Services (DHFS). Other proposed revisions are in response to 1997 Wisc. Acts 27, 237 and 768 and updating administrative rules to be more contemporary within the industry by adopting more recent nationally-recognized standards.

Chapter Comm 81, definitions and standards, is proposed to be revised to reflect the adoption of more recent nationally-recognized standards for various plumbing products-- fixtures and faucets, and piping materials, joints and fittings. A number of definitions have been created. [Chapter Comm 81 was created in Clearinghouse Rule No. 98-83, which was adopted after the public hearing was held on this rule revision.]

The adoption of updated standards would allow the use of elliptical concrete piping for storm and clear water drain. Also, included are provisions for the Department to create a process to tag cross connection control assemblies for the purposes of tracking cyclical testing to assure the compliant operation of these devices. One portion of the rule, s. Comm 82.40 (3)(d) 3., is planned to be delayed effective six months after the effective date of the other portions of this rule. This section relates to the tagging of all cross connection control assemblies.

Chapter Comm 82, the design, construction, installation, supervision and inspection of plumbing, is proposed to be revised to address conformance in definitions with DHFS for health-related occupancies. Section Comm 82.50 provides for methods to avoid scalding at the point of water usage, as well as providing a maximum water system temperature to reduce and/or eliminate the environment for *Legionella* bacteria in the supply water system.

A process for submittal and review of alternate and experimental plumbing system designs in s. Comm 82.20 has also been established. This will allow submittals and review of plumbing systems for statewide use on an experimental basis, similar to approvals for plumbing and building products and materials.

Section Comm 82.33 has been repealed and recreated to clarify the allowable options for public swimming pool, wading pool and whirlpool discharges.

Portions of the Appendix have been updated to reflect the following: the most current listing of water quality management agencies for use in plan submittal, and the revision of some figures to reflect spacing requirements between bathroom fixtures.

The proposed rule revisions were developed with the assistance of the Plumbing Advisory Code Council. The Plumbing Advisory Code Council consists of the following individuals: Thomas Boehnen, American Society of Plumbing Engineers; Rudy Petrowitsch, American Society of Sanitary Engineers; Gary Hamilton, State AFL-CIO; Gary Kowalke, Wisconsin Association of Plumbing, Heating, and Cooling Contractors, Inc.; Mark Krowski, City of Milwaukee; Jeff Kuhn, Plumbing and Mechanical Contractors of SE Wisconsin; Clint McCullough, Madison Contractors Association; Bob Netzler, League of Wisconsin Municipalities; Dave Viola, Plumbing Manufacturers Institute; Dale Schlieve, WI Society of Professional Designers of Engineering Systems, Inc.; and Gene Shumann, plumbing designers.

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SECTION 1. Comm 81.01 (7e) is created to read:

Comm 81.01 (7e) "Alternate plumbing system" means a type of plumbing system designed in such a manner that valid and reliable data shall demonstrate to the department that the plumbing system is in compliance with the intent of chs. Comm 82 and 84.

SECTION 2. Comm 81.01 (17e) is created to read:

Comm 81.01 (17e) "Backflow preventer" means any generic backflow prevention devise or assembly.

SECTION 3. Comm 81.01 (18) is amended to read:

Comm 81.01 (18) "Backflow preventer with intermediate atmospheric vent" means a type of cross connection control device which consists of 2 independently acting check valves, internally force-loaded to a normally closed position and separated by an intermediate chamber with a means for automatically venting to atmosphere, where the venting means is internally force-loaded to a normally open position. The terms "backflow preventer" or " dual check valve type with atmospheric port backflow preventer" has the same meaning as backflow preventer with intermediate atmospheric vent.

SECTION 4. Comm 81.01 (20) is amended to read:

Comm 81.01 (20) "Back siphonage backflow vacuum breaker" means a type of cross connection control device which contains a check valve force-loaded closed and an air inlet vent valve force-loaded open to atmosphere, positioned downstream of the check valve, and located between and including 2 tightly closing shut-off valves and 2 test cocks. The term "SVB" has the same meaning as back siphonage backflow vacuum breaker.

SECTION 5. Comm 81.01 (60e) is created to read:

Comm 81.01 (60e) "Community-based residential facility" has the meaning specified under s. 50.01 (1g), Stats.

Note: Section 50.01 (1g), Stats., reads: "Community-based residential facility" means a place where 5 or more adults who are not related to the operator or administrator and who do not require care above intermediate level nursing care reside and receive care, treatment or services that are above the level of room and board but that include no more than 3 hours of nursing care per week per resident. "Community-based residential facility" does not include any of the following:

(a) A convent or facility owned or operated by members of a religious order exclusively for the reception and care or treatment of members of that order.

(b) A facility or private home that provides care, treatment and services only for victims of domestic abuse, as defined in s. 46.95 (1) (a), Stats., and their children.

(c) A shelter facility as defined under s. 16.352 (1) (d), Stats.